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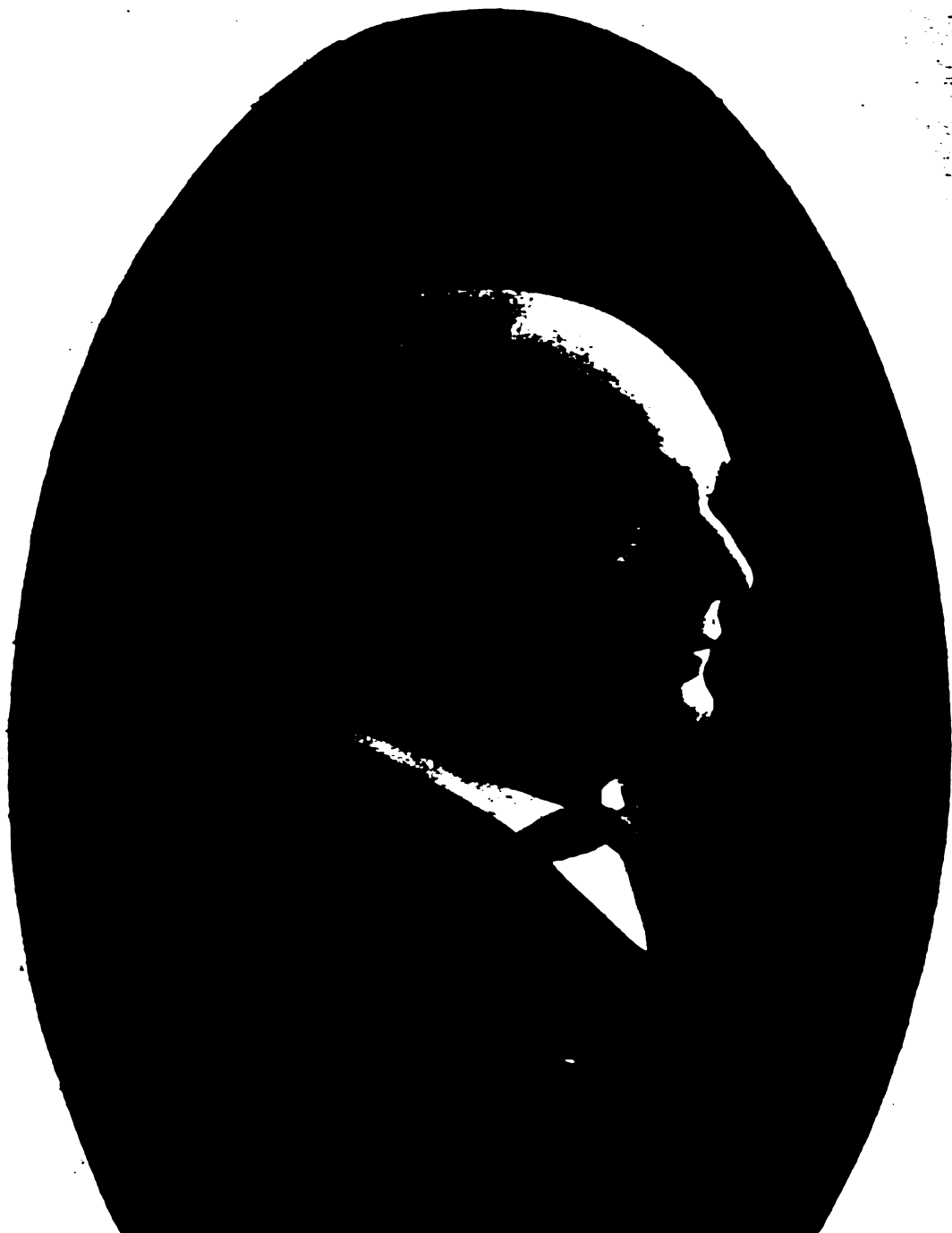
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POLLUTION OF KANSAS STREAMS.

J. L. EVERHARDY, A. M., M. D., Leavenworth, Kansas.

Read before the Kansas Medical Society, May 6, 1910.

Kansas is prospering and growing in population. Density of population carries with it the penalty of increased morbidity and death. A source of danger in a community is often an impure and unwholesome water supply.

Water is man's greatest necessity. Water comes to us from snow and rain, and is collected from nature in springs or underground sources, from ponds, lakes and rivers. The location of cities on streams, lakes and the coasts is a matter of convenience and commerce. Then such a body of water is made to serve as water-supply and a vehicle for refuse of factories and urban life. Surface water is used for commerce, fishing and recreation, industrial, domestic and sanitary purposes.

The requisite of a water for commerce is that it offer no obstruction to navigation, and such a water is in this sense under control of the Federal Government. Fish will not live in streams when the water is befouled with refuse, or rendered acid in reaction. Swimming, boating and park attractions demand that a body of water be clear and free from noxious odors. Industry requires an enormous amount of water, and this of certain qualities. For example, large amounts of water are required in the manufacture of paper, some mills requiring as high as 1600 pounds of water for every pound of paper made. Manufacturers before locating a factory now study the quality of water as well as the source and extent of supply.

An iron-bearing water cannot serve in bleaching without purification, and tanning calls for water free from calcium carbonate. Corrosive water forms scales in boilers for steam-making, and here the quality of water reckons in the amount of steam raised, fuel consumed and the life of the boiler, not to mention the

toll of human life when boilers blister and crack, causing explosions from overheating. The quality of water in laundering and soap manufacture is a matter of prime consideration. Hard water curdles soap and wastes much of the soap from precipitation of the fatty acids.

It is necessary that water used in the manufacture of ice answers all requirements of potable water, and distilled water is generally used, as the natural purifying powers of the freezing process cannot be relied upon to free the water from all bacteria. It is obvious that carbonating works must be extremely solicitous as to the purity of water used.

A most important and extensive use of surface water is for domestic supply. Often a city uses the same stream for water supply and a carrier of its sewage and refuse.

Most of the surface water in Kansas comes from its own snow and rainfall. The annual rainfall at the eastern border is 40 inches, and 15 inches at the western boundary. The acquired streams come from Colorado and Nebraska. The streams of Kansas flow South and east as a rule, with small affluents flowing north and west. The flow of the ground waters is generally in a south-easterly direction.

In looking at a relief map of Kansas we notice three principal water-sheds. Starting at the western border a divide runs east through Greely, Wichita and the counties on this tier, to the eastern border at the southeastern corner of Johnson county. North of this divide is the water-shed of the Kaw river, embracing almost one half of the State. South of this divide and extending from Colorado to the Eastern margins of McPherson and Harvey counties, northern and eastern lines of Butler county and eastern confines of Cowley county, is the water-shed of the Arkansas River. East and south of these divides, draining the southeastern section of the states are many smaller rivers flowing east and south into Missouri and Oklahoma. Four northeastern counties border on the Missouri river.

With increase of population a problem of pure water-supply arises in the affairs of city life. In 1908 forty five Kansas cities, containing 318,634 inhabitants drew their water supply from surface waters, while 72 cities, with 76,730 population, used water from shallow or deep wells.

The subject of garbage and sewage disposal should receive the most serious consideration. A radical change in the present method of disposing of this refuse is necessary. Rivers are now convenient, but this practice must stop, and the nuisance abated,

even with great expenditure of money.

The custom of one city passing on its sewage and garbage to the next city a few miles down stream is abhorrent in the extreme. But this has always prevailed in this country. The European countries considered this matter half a century ago, on account of increasing density of population and resulting epidemics of typhoid fever, cholera and diarrhoea.

Accordingly these countries, impelled to action by this new danger to life, adopted methods of water and sewage purification and prevention of stream pollution. In Germany in 1877 the death rate from abdominal typhoid was 46.0 per 100,000, which rate was reduced to 11.0 in 1901. In 1900 the death rate in the registration area of the United States was 35.9 per 100,000, while in the same year the rate was 11.0 in Germany and 7.0 in Switzerland. Germany reduced this rate to 7.0 in 1902, and Switzerland's rate was 5.0 in 1903. The rate in the United States fell in 1904 to 32.0. In Kansas in 1909 there were 355 deaths from typhoid fever—a rate of 21.5 per 100,000, entirely too high for this preventable disease. Kansas is not so densely populated as those states in the registration area. The etiological factors of milk, vegetables, shell-fish, flies, filth and contact in typhoid fever are not disparaged.

In this country stream pollution has been a serious menace to many cities. Albany, Lowell, Lawrence, Washington, Pittsburg, Cincinnati, Louisville and New Orleans have had their outbreaks of typhoid fever from polluted water. They have at great expense corrected the evil.

With newly discovered resources and increase of population come factories and still more population. Then come pollution and contamination of streams. Industrial pollution of streams results from conducting into a stream the wastes of such institutions as bleaching and dye works, tanneries, mines, paper mills, iron works, oil wells, distilleries and others. This pollution is sometimes a source of danger to the water supply of a city, or detrimental to the quality of water used by another factory down stream.

In 1908 Dr. Crumbine of the Kansas Board of Health and Prof. Barber of the Kansas University took 80 samples of Kaw river water from a point west of Topeka to a point near Lawrence. The water west of Topeka was found to be impure and unwholesome, and this condition was largely increased in the water east of Topeka after receiving the sewage from Topeka. The natural purification of the water in the stream before it reaches Lawrence

was found to be slight. A similar condition exists in many of the valleys of the state. It must be conceded that some streams, such as the Missouri, have a natural sand filtration from the strong currents and swirling eddies.

The consideration of stream pollution naturally divides itself into two main heads—prevention and remedy. In the line of prevention let us adopt a different system of garbage and sewage disposal. Refuse can be sorted out for a profit. Coal can be reclaimed from cinders, stannous chloride from tin cans. Metals, paper, rubber and rags can be sorted. Slops can be converted into grease and alcohol or fertilizer. Manure can be burned or hauled to the farm. Septic sewage can be treated according to character, so that after purification the effluent can be turned into a river without danger of pollution.

The object of sewage purification is to remove pathogenic bacteria and to break up organic matter. The scope of this paper only permits allusion to naming methods—as septic tanks, contact beds, trickling and sand filters, with combination of methods. For most Kansas cities the septic tank best answers all requirements. Many small towns are now constructing septic tanks.

Proper construction is important, and subsequent proper operation is just as essential, no matter which system is adopted. Many splendid plants become inefficient on account of incompetent operators or stinted appropriations by municipalities. This year the Federal Government is expending over \$7000 for overhauling the efficient crematory at Ft. Leavenworth.

One community should carry on sufficient sewage purification and the next down stream should purify its water-supply. In this section of the United States the streams are very turbid and require special treatment of purification. The methods in use are sedimentation and sedimentation with mechanical filtration. Slow sand filtration is preferable but not applicable to our turbid streams. For all purposes the best method for our muddy waters is that of sedimentation and coagulation, with mechanical filtration. Water is pumped from the river into a settling basin; the water flows slowly from this and receives an amount of aluminum sulfate and milk of lime for coagulation, and passes into other settling basins, becoming clearer in each succeeding basin. The water is then pumped into a tank where after being further settled and clarified, it runs by gravity into the mechanical sand filters in the filter house. The filtered water collects in a sluice and runs into the clear water basin for final pumping into the distributing reservoir.

Industrial wastes should be treated according to chemical nature before being conducted to any natural water of the state. In Germany the authorities consider the possibility of stream pollution before granting concessions for establishing new works, or where alterations in any works are intended. Police power applies to works needing no concession for establishment.

Legislation against stream pollution must consider the rights and duties of individual riparian owners, rights and duties of municipalities and rights and duties of the public at large. Such legislation is in the hands of the different states, and these states have different laws according to varying interests, difference of natural conditions, density of population and ignorance of consequence of pollution. However pollution in one state reaching another state and threatening its health or property rights, enables, the injured state to become a party complainant in the Supreme Court of the United States. Cities have a right to use streams flowing through them as open sewers, with liabilities for injury to adjoining property.

The great object of legislation should be to have a stream maintained in its natural condition. Then industries can safely locate, depending on the qualities of water as found before establishing. So a city, drawing its water-supply from a stream would be endangered and if another city up stream would suddenly discharge its sewage into that stream, or a paper mill might be ruined if some industry would locate in close proximity upstream and change the character of the water.

Kansas has a good water and sewage law passed in 1907 and 1909. It calls for registration of all water works and sewage plants existing at time of passage of the law. It requires all corporations or municipalities intending to construct new water works or sewage systems, or the extension of established systems, to obtain a written permit from the state Board of Health, and to furnish maps, plans and specifications of plants. The State Board of Health can order changes in the source of water-supply, manner of storage, purifications, or treatment before delivery of water for drinking purpose. Pollution of streams by sewage is forbidden, except where such system is in operation at time of passage of law.

Sewage is defined as "any substance that contains any of the waste products or other discharges from the bodies of human beings or animals, or other wastes from domestic, manufacturing or other forms of industry." The law creates the office of sanitary engineer, who investigates and reports on all matters rela-

ting to water-supply and sewerage, acting in capacity of adviser to the State Board of Health.

The law is a good one. However it should be more stringent and forbid all garbage and sewage from being conducted into any water of the state. The state Board of Health should be allowed more assistants to the State Sanitary Engineer and a larger appropriation should be made for the sanitary fund of the same board for conducting the work as efficiently and thoroughly as the progressive and prosperous people of Kansas demand. Since the passage of the Water and Sewage law the State Engineer has taken some action in 22 water supplies, and has granted permits to 47 cities for new water supplies or extensions. Since July 1, 1907, plans for between $3\frac{1}{2}$ and 4 millions dollars worth of work have been submitted. About 40 sewerage permits have been granted.

The time is coming when the Federal Government should legislate against the flagrant pollution of interstate streams. This may come after the new department of Health is created. To conserve the health and the wealth of its citizens Kansas should prevent the pollution of its streams.

STRICTURE OF THE URETHRA.

Prognosis and Treatment.

S. G. ZINKE, M. D., Leavenworth, Kansas.

Read before the N. E. Kansas Medical Society, Leavenworth, Kansas, Oct. 27, 1910.

The prognosis of stricture of the urethra depends on several different things: Treatment, which is probably the most important; the character of the lesion and its location; its origin, whether gonorrhoeal or traumatic. The prognosis also depends on the physical condition of the patient and upon his ability to adapt himself to a long course of treatment where such is necessary.

As regards a matter of life and death, the prognosis of stricture is very good, being (except in neglected cases) rarely fatal. Death may occur, however, from extravasation of the urine following rupture, from urinary septicæmia, pyonephrosis, etc. The treatment may kill the patient, reflex congestion of the kidney being sometimes induced by the passage of a sound. The injudicious use of cocaine, the shock upon a diseased heart or status lymphaticus may contribute to a fatal result.

Traumatic strictures contract rapidly, often in spite of most energetic efforts, while gonorrhoeal stricture do so more gradually.

Those in the pendulous portion contract slowly and are, as a rule, much more amenable to cure. Those in the perineal urethra are less liable to respond to treatment as they tend to re-contract with great rapidity. The latter are also as a rule more dense than those in the anterior portion, form quicker and contract more rapidly.

The more extensive a stricture, the denser the scar and the more irregular its surface, the less chance is there of a cure.

The main object of the treatment of stricture is the enlarging of the urethra to a certain caliber and keeping it there. This is best performed by dilatation. Never cut until dilatation fails and remember that the patient is never cured unless he stays cured.

The prophylactic treatment varies. Traumatic stricture can best be avoided by prompt action at the time the injury is received. If the injury is a mild one in the pendulous portion, keep the urethra clean; do not use a catheter in these cases. If the injuries are moderately severe they represent, in a measure, slight lacerations. Here we must avoid infiltration by keeping the urethra clean, by regular catheterism every six or eight hours or by the retained catheter. Always advise the patient of the possibility of stricture. In the milder cases contraction begins about the sixth week. In both the mild and the moderately severe cases, the caliber must be maintained by sounding.

Perineal ruptures and severe injuries to the pendulous portion call for immediate external urethrotomy and suture.

The majority of strictures are, fortunately, due to gonorrhœa. Prophylactic treatment here consists in the prompt relief of the intense inflammation which accompanies an acute gonorrhœa and in cutting down the duration as low as possible. This prophylaxis is, however, but relative. No one can tell which case is going to have a stricture and which one is not. Chronic gonorrhœa favors strictures formation, so it is evident that the latter complication is best avoided by thorough and intelligent treatment of the acute cases.

The instrument best adapted to the treatment of stricture is the sound. I am sorry to say that it is more often used wrongly than rightly, and the patient harmed rather than benefitted. There are two common sources of error in the manipulation of the sound—haste and force. The man that uses a sound properly is always extremely gentle and patient. If force is employed it will, at the very least, cause a sharp inflammatory reaction which only tends to increase the amount of scar tissue and make

it more dense. It may bruise and tear the urethra and form a traumatic stricture. False passages may be produced. Not only is this most embarrassing at the time but it increases the difficulty of passage at subsequent sittings. A sound, if of metal, should pass with practically no assistance other than its own weight. If there is any resistance, try a smaller size. Take your time. Ninety-nine times out of a hundred one will slip through, and when such takes place, you will find that you can usually pass one or two more of larger size. The passage of a sound is, to say the least, not the most comfortable thing that can happen to a man, but it is not necessary to make it an act of torture. Further, cut out the cocain; let your anatomy alone and let your patient tell you by his actions whether you are in the right channel or not. The man that never exercises force will succeed where others fail. Try it. Keyes says, "The maximum of effect is produced by the minimum of effort. Guyon, "The effect is due, not so much by the pressure of the sound, but to its mere contact."

Strictures at the meatus are best treated by meatotomy, the cut surfaces being kept apart by means of a strip of guaze or, as I prefer, by catching up the mucus membrane and skin on each side separately and tying with a piece of "O" or "OO" cat-gut.

Spasmodic stricture may often be relieved by the passage of a full-sized sound or by a hot sitz-bath. If you know the stricture to be spasmodic a few drops of a 2% solution of cocain may solve the difficulty. If very severe, a general anæsthetic may be necessary to overcome it.

Strictures of large caliber constitute the majority of cases a physician is called upon to treat, the patient complaining of a gleet discharge, and possibly, an increased frequency of micturition. They are first examined with a bulbous bougie, to locate the size and location of the lesions. This having been elicited, no further instrumentations are advisable; at that sitting. After cautioning the patient not to mind the smarting at the next urination, a few drops of a ½% solution of silver nitrate are instilled, he is given a prescription for urotropin, and told to report again in four days. Eliminate nephritis and hyperacidity by urinalysis. Study the habits of the patient. Further, the man should always be informed that, after all symptoms have disappeared (if the stricture is in the posterior urethra) the permanency of his cure will depend upon the proper passage of a sound on himself at proper intervals.

Dilatation with a conical double-taper steel sound will be

found best adapted to the majority of uncomplicated strictures of large caliber. In size it should conform to that of the bougie passed. Insert gently and remove as soon as it has entered the bladder. Nothing is gained by leaving a sound in place for five or ten minutes as is recommended by some. If this first sound has passed readily one or two of larger size may be used. The danger of false passage being produced by a sound of large caliber is very slight yet the exercising of force may set up an epididymitis, urethral fever or produce an inflammatory condition in the stricture. Until one knows his patient it is well to insist on urotropin before, cleanliness during and either silver nitrate or permanganate after sounding. After the case is known the urotropin may be dispensed with. At each subsequent visit begin with a size or two smaller than the largest used at the previous sitting and carry the dilatation as far as possible without the use of force. Twice a week, or better still every fourth day, is often enough for the passage of instruments. This does not apply to filiforms as will be shown later.

The extent to which dilatation should be carried is governed by no fixed rule. If the meatus is not congenitally small, or contracted by disease, it will be found most satisfactory as a gauge in the majority of instances. To properly gauge its caliber it must be put lightly on the stretch. Overstretching, as is denoted by a white line surrounding the lips of the meatus, is not desired. There is some discomfort at first but it soon passes off, particularly if the sound is a double taper. Once stretched to the size of the normal meatus, (usually from a 27 to 32F.) a stricture will, almost invariably, be curable; the inflammation subsides and recontraction does not take place when the intervals of sounding are increased.

Occasionally the bands of scar tissue lie deep and are very elastic, contracting again as soon as bi-weekly soundings are discontinued. Here the gauge of the urethra is too small and, as further dilatation of these strictures is necessary, one must either sacrifice the integrity of the meatus or resort to the Koollman dilator. These measures failing a cutting operation is called for. The dilator may also be used to an advantage in those cases where the meatus is normal but further dilatation of the stricture is necessary to prevent recontraction. If the stricture is tough and resists dilatation one of two courses is open to the physician; either resort to urethrotomy or, if the patient is willing to stand the test, put him on gr. ii doses of thiosinamine. (One dose every other day in a little wine.) Belfield, of Chicago, claims

some success with this remedy.

When a stricture in the pendulous urethra fails to recontract within a reasonable period you may feel assured that a cure has been established. When the stricture has been fully dilated and when large shreds are no longer present, unless they be from the posterior urethra, the patient may be dismissed and told to report again in two weeks. At his next visit, if no contraction has taken place he is told to report again in one month and then again in two months more if the channel is still free. If the caliber is still the same, he can be pronounced cured.

In strictures of the bulb, unless they are soft and yield readily to one or two dilatations, reconstrictions are bound to occur. These cases must be taught to use a full sized sound upon themselves at regular intervals. These intervals vary from one week to one year. These patients must be made to understand that they are responsible for their future well-being.

Strictures under a 15 F. are classified as strictures of small caliber. These are best treated with soft instruments as the danger of making false passages with small metal sounds is very great. (I use the flexible bougies up to a 20 or 21 F.) Here again dilatation is the best method of treatment providing that the stricture will dilate, that the patient has the time and is inclined to go thru a long course of dilatation and providing that urethral chills following sounding are not too numerous.

When the stricture admits filiforms only, the best results may be obtained with a Banks bougie. The introduction of the filiforms is often difficult, and, as no force is to be employed, it often taxes the patience of physician and patient. If the filiform catches it may be assisted thru a narrow opening in one of several ways.

1. Withdrawal and rotation, coupling the latter with advancement.
- (2) Use of filiforms having their extremities bent in various shapes.
- (3) Filling the urethra with a bundle of filiforms, in this way plugging up all openings in the urethra and pushing gently on each in turn until one is found which slips thru.
- (4) Assisting the point of the filiform to pass over folds in the posterior urethra by means of a finger in the rectum.

Occasionally a urethroscope may be of benefit but it rarely succeeds where other methods fail.

■ ■ ■ In exceptional cases filiforms can only be introduced after long and persevering efforts. You must then determine whether it is best to tie the filiform in, try to pass another instrument, perform a urethrotomy or what else. If the patient is up and about, the tying in of a filiform is somewhat dangerous, if he is to remain in bed, this treatment is very satisfactory. In-

termittent dilatation may be followed by retention but, as a rule, the filiform can be reintroduced on the third day followed by larger instruments. The Banks bougie, if you can introduce it, solves the problem. Don't operate unless you have to. If you decide on continued dilatation, replace the filiform on the second day with a larger instrument. Then go ahead with the intermittent treatment.

Retention is fairly common in those suffering from stricture. The patient may be enjoying, apparently, the best of health, when suddenly, after having been out on a toot, after exposure to cold, or after the passage of a small sound, he discovers that he can not pass water. In cases of retention I always try to pass the largest sound that will enter the meatus without the use of force. This failing I try a small catheter and if this brings no results (if the obstruction appears to be at the cut-off muscle) I drop in a few drops of 2% cocaine. This some times relaxes the spasm. Then, if I do not succeed, I try a hot sitz-bath. as hot as can be born. If it is hot enough to make the patient feel faint it is more likely to act. If there is no indication of a spasmodic stricture, the cocain is not used. Banks bougie is tried. Past history, which the patient will readily give in these cases, must be taken and your treatment must conform to this. After any of the above have proven effective dilatation must be instituted.

Should all of these methods fail the bladder must either be aspirated every eight hours for a day, or, as I prefer, introduce a small No. 12 F. catheter thru the canula, remove canula and allow catheter to remain for a day or two. The flow of urine is controlled by either tying a knot in the catheter or by means of a hæmostat. I also like to irrigate the bladder with a mild solution of permangante, 1-6000. each time that the bladder is emptied. At the end of a day or two the patient is again placed in a hot sitz-bath when, if there is no flow, the stricture may be considered impassable.

No stricture is impassable as long as urine can leak thru. I may, however, be impervious to any instrument even tho' the urine flow in a steady stream. In these cases, if there is no retention one can frequently coax the stricture into admitting an instrument.

Each case must decide for itself how much persuasion is necessary before resorting to an external urethrotomy without a guide. In old cases the physician may base his opinion on what he knows of the former history of the case. If you doubt that

the patient will submit to proper treatment, once his immediate necessity is relieved, it is best to insist on an immediate perineal section. If it is the patient's first retention and if the urine has previously-passed in a good sized stream it is best to adopt palliative measures as an external urethrotomy without a guide is no snap. On the other hand, if there has been previous trouble of like character and the urine has been coming in a slow stream, delay may be dangerous.

Traumatic strictures are prone to recontract, and are often made worse by sounding. Here urethrotomy is indicated. Where the scar is linear a simple perineal section will suffice. If it is annular all of the scar tissue must be removed and the perineal opening closed by suture or graft. Other resilient strictures are to be handled in a like manner.

Innodular or indurated strictures which occupy a considerable portion of the urethra do not always take kindly to dilatation. They may then be improved by simple section or, as is more often the case, by excision.

If there is a prostatitis present we have the so-called irritable stricture. Operation is the simplest mode of treatment in these cases but can often be avoided by building up the system, putting the patient on large doses of urotropin and by using flexible instead of metal instruments.

One of the most common accidents resulting from the injudicious handling of strictures, particularly where there is retention, is false passage. After such has been produced the let-alone policy should be adopted. If the patient can urinate there need be no haste. Blood will flow for a day or two, followed by the discharge of pus for a few days. In favorable cases the wound heals in two weeks. The greatest danger lies in a too sudden return to instrumentation. If there be retention it is best to tap the bladder and insert a small catheter thru the canula as mentioned above. Put the patient on urotropin, irrigate the urethra gently with some mild antiseptic and let the urethra absolutely alone for a few days. The irritation which caused the retention will probably pass off in two or three days and the patient be able to pass his urine in the normal manner. When this occurs remove the catheter. Occasionally, in passing instruments, you may run into old false passages. If so, study their location and avoid them in the future. As most false passages are made in the floor of the urethra it is best to hug the roof with the tip of the sound.

Stricture complicated by peri-urethritis is almost entirely preventable. Early incision of the foci of suppuration and intel-

ligent treatment of the stricture will obliterate the condition. A goodly proportion of these cases complain of an ague for a few days, possibly with slight local symptoms. An examination at this time will reveal a tender perineal mass, free incision of which will save the patient much discomfort or possibly his life. There is no palliative treatment for this condition. If the condition is one of simple inflammation, gentle sounding, coupled with hot sitz-baths and leeches, may cause them to break down rapidly and disappear.

If there has formed a perineal abscess, it should be opened and drained and the stricture should be cut. If large, the incision should be very free.

If there be a large infiltration numerous free incisions should be made, the entire area laid open and all necrotic tissue removed.

Stricture complicated by prostatic abscess requires section of the stricture with incision and drainage of the abscess. If acute pyelonephritis is present the kidney must be drained thru perineal section or thru a retained catheter. If these fail perform nephrotomy.

If there be a fistula present the stricture must be dilated. A simple fistula will then heal of its own accord. If the fistula is indurated and the stricture resilient or impassable all of the scar tissue must be removed and external urethrotomy performed. (This means all of the scar tissue about the fistula.) The injection of pure peroxide of hydrogen is often curative in a fistula of the penile portion of the urethra and may be of benefit in the perineal type.

Points to be remembered in the treatment of stricture:

(1) Alkalies and rest are always serviceable, especially so if complications are present.

(2) Uncomplicated, non-resilient and not too highly irritable strictures best treated by dilatation, up to 20 F. with flexible instruments, above with metal sounds.

(3) Urotropin before, asepsis during and either silver nitrate or permanganate after sounding.

(4) Dilatation rarely necessary beyond caliber of normal meatus.

(5) If stricture resists, try thiosinamine.

(6) If patient does not want to waste time or if there are complications, cut. (In very tight strictures).

(7) Internal urethrotomy for strictures in the pendulous portion, external or combined for perineal strictures.

(8) Anterior commonly curable, posterior incurable.

(9) Impassable strictures without retention usually amenable to treatment. If finally found impervious perform urethrotomy.

(10) Retention not relieved by catheter requires hot baths or hot sitz-baths, the hotter the better.

(11) If these fail, aspiration or urethrotomy, preferably the former.

(12) Traumatic strictures often preventable by prompt treatment at time of receipt of injury. Later, urethrotomy.

(13) Excision for resilient or nodular strictures.

(14) Irritable strictures seldom require incision.

(15) Acute inflammatory complications usually call for operative interference.

(16) Never cut unless dilatation fails.

(17) Last but not least, **USE NO FORCE** in the manipulations of metal instruments and little or none with flexible ones.

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OBSTRUCTED NASAL RESPIRATION AND DRAINAGE.

(Diagnosis and effects.)

DR. H. L. ALKIRE, Topeka, Kansas.

Read before the Golden Belt Medical Society, Junction City, Kansas.

Only within recent years have the nose and nasopharynx received much thoughtful consideration.

Formerly the nose was described as the essential organ of the sense of smell. Its most important pathology was vaguely spoken of as catarrh, the loss of smell its most disturbing sequel. The usual treatment consisted of douches, sprays and snuffs recommended by the physician or a lay person of experience, and applied by the parent or the patient. The more thorough study in the laboratory and the clinic has revealed, the fact, that the sense of smell is the least important of the nasal functions, and has demonstrated that free nasal respiration and unobstructed nasal drainage are of inestimable value in maintaining a normal condition of the body. It is to these functions of the nose we should give most thoughtful consideration.

First, Respiration.—The inspired air in its passage through a normal nose is modified to suit the need of the organ to which it is to go. Foreign bodies are removed, temperature and moisture regulated. If the air should be thus treated the condition of the nose must be adequate for such treatment. Mechanically

considered, the air must be so spread over the mucus membrane to permit of said changes. If the measurements of the nasal fossal are of such large dimensions as to permit part of the air to pass without being properly modified, or too small to admit sufficient quantity of air, abnormal conditions will develop.

Second, Drainage.—The pneumatic cavities, known as the accessory sinuses of the nose, communicate with the nasal fossæ and drain into them, the orbital secretions escape via, the nasal sinuses. The mucous membrane lining the nose pours its secretion into the nasal fossa as a canal of exit.

Other functions of the nose, olfaction, phonation, oxidation, etc., have little to do with the pathology, and need not be considered in this essay.

Kyle, in his most excellent work makes this statement; too much importance cannot be attached to obstructed nasal breathing. If long continued it produces a marked effect on the general health; especially is this true in children.

Ballinger, in his recent work puts much emphasis on this physio-pathologic law. "Cavities lined with mucous membrane are predisposed to inflammation when their drainage and ventilation are obstructed."

Clinical observations verifies the truthfulness of their statements. In nasal as in other pathology, the general practitioner is usually the first to be consulted; consequently a discussion by this society of the classification diagnosis and effects of lesions producing obstructed nasal respiration and drainage may not be untimely. The following classifications will be sufficient for the purpose of this paper.

Deformities of the bony frame work; Deflected septum; Osteoma; Spines and Crests; Myoma or Nasal polypi; Fibroma; Adenoma; Adenoids; Hypertrophied Tonsils; Hypertrophied Turbinates.

A glance at this list will, no doubt, cause most of us to realize that a diagnosis depends almost exclusively on inspection, furthermore—that the value of such inspection must depend upon the ability of the observer to make a searching examination and to determine the true nature of the objects seen. Such art and ability is not inherited but is the product of much careful study and training. Every text book describes the necessary instruments and methods for making examinations of the nose. I believe it to be a duty of every practitioner to prepare himself to make such examinations and to acquire sufficient skill to make a diagnosis.

The symptoms of nasal obstruction are much the same, no matter what the lesion, being modified by the age of the patient, the extent of the obstruction and the length of time it has existed.

Obstructed respiration is the most constant symptom, it may vary in amount from an almost imperceptible degree to complete closure of the nose and mouth breathing. Discharge from the nose or from the naso-pharynx should always arouse suspicion. If in children, it usually indicates adenoids. Frequent colds, ear-ache, etc., indicate naso-pharyngeal pathology. Absence of normal nasal resonance of the voice depends upon the amount of obstruction. The facial expression, deformity and mental condition are dependent upon extent and duration of the obstruction also the age of the patient. Physical changes due to to malnutrition resulting from obstructed breathing are too numerous to be considered in this paper.

Deformities are significant in proportion to their interference with the functions of the nose, or detract from the facial appearance of the individual. A deflected septum should be carefully inspected, with reference to drainage, pressure and respiration. As a rule deflections in the middle turbinal region are more important because the frontal sinus and ant-ethmoid cells through their ducts and the maxillary sinus through its ostia, communicate with the middle meatus. Obstructed drainage or infection of the mucous membrane in this region may cause infection and inflammation in the mucous membrane of the sinuses just named.

Pressure on any part of the nasal mucous membrane will if continued produce pathological changes. Closure, partial or complete, of the olfactory fissure will interfere with drainage from post ethmoid cells and sphenoid antrum, said interference may cause inflammation changes in the mucous membrane and communicating cavities above. Osteoma, spines, crests, etc.; their presence must be determined by inspection. Myxoma or nasal polypus, fibroma, adenoma and other tumors found in the nasal fossa are diagnosed as in other parts of the body, by microscopic and macroscopic examination.

Hypertrophied turbinates and hypertrophied tonsils are diagnosed by inspection. Adenoids are the most common of all nasal lesions, the symptoms: obstructed breathing, discharge from the nose, hypertrophy of the lymphoid tissue in the post-pharyngeal wall, below the soft palate, and in advanced cases mouth breathing etc., are usually sufficient for a diagnosis. The use of the index finger or the pharyngeal mirror may be used to

confirm the diagnosis.

The disturbance or damage resulting from one or more of these lesions, is usually in proportion to the amount of obstruction resulting from their presence, also duration. Obstructed nasal respiration and drainage, is frequently a very potent predisposing cause in the following diseases, acute rhinitis; chronic rhinitis; hyperplastic rhinitis; hypertrophic rhinitis; inflammation of the sinuses; inflammation of eustachian tube, tympanum and mastoid, brain abscess of otitic origin; reflex neuroses and ocular troubles.

Statistics show approximately ninety-five per cent of school children having earache also have adenoids; seventy-five per cent of brain abscess are of otitic origin.

New York school statistics show that one child in every six has adenoids.

Some of the effects of obstructed nasal respiration as observed in children, the forced inspiration produces a drawing of the facial muscles, changing expression, producing deformity and lack of mental development. Probably the deformity, if excessive will be most noticeable in the narrow face, the high and irregular arched hard palate, contracted superior dental arch with teeth, irregularly placed and not articulating with corresponding teeth of the inferior dental arch. Abnormal pressure on the nerves may cause the nutrition to be arrested to such an extent as to alter the development of the teeth leading to early decay and pyorrhea alveolaris. In some cases the contour of the chest is changed and cardiac pathology produced. Obstructed respiration or defective drainage are predisposing causes of inflammation of the mucous membrane lining the nose. The inflammation may be acute or chronic.

The symptoms may be very pronounced or sub acute. Acute rhinitis in point of frequency heads the list of nasal diseases.

You are familiar with its symptoms, slight exposure or atmospheric changes, especially during the winter and spring months produces that very familiar condition "known as a cold in the head." Probably it has been so common with that member of the family, neither the parent or the doctor considers it worthy of attention, probably the acute manifestations disappear within a few days, the child to the superficial observer is well, until another attack not unlike previous attacks appears and disappears.

Ear-ache may be added to the list of symptoms with a possible gathering in the head, but children are expected to have colds and earache, so say those who are familiar with the care of

children. Thus far nature's signals for help have not been heeded.

Defective hearing may be added to the list, also mouth breathing, and purulent nasal discharge. The wise say the child will out-grow these and call attention to the apparent lack of strength and vitality.

Time proves, the prognosis thus far offered has not been realized. Operative treatment previously advised and often urged is refused. A chronic condition may be established, resulting in dulled senses and loss of hearing. A reward for ignorance or the acute process may invade the brain and terminate the drama.

In conclusion, I wish to call attention to some valuable experiments made by Willis S. Anderson and his conclusions. The experiments were made upon dogs. The nostrils were artificially closed so the animal could get about one third the usual amount of air.

His observations.—Experimental Study of Nasal Obstruction in Dogs. (18) By Willis S. Anderson, Detroit.

Labored respiration, characteristic of asthma and emphysema; hair loses its gloss, becomes thinner, etc., skin wrinkled.

Effect upon progeny was especially interesting. Of twenty-four puppies born of mothers having one third breathing space all showed greatly reduced vitality, seventeen died within one hundred days.

Conclusion of Willis S. Anderson.

1. That Nasal Obstruction leads to death or serious impairment of vitality.
2. That the lowered resistance predisposes to infections.
3. That local disease of the respiratory tract is induced.
4. That Nasal Obstruction leads to dilatation of heart.
5. That changes in the skin and blood of the dogs occurs.
6. That symptoms resembling asthma and emphysema may be induced.
7. That emphysema of the lungs can be demonstrated histologically.
8. That reopening of the nostrils is followed by prompt disappearance of the symptoms.

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SOME THOUGHTS ON CATARRHAL PNEUMONIA.

W. G. NORMAN, M. D., Cherryvale, Kansas.

Read before the South-East Kansas Medical Society. April 12, 1910.

I have chosen this subject, not because I know more about

it than any other, nor because I have given it any special amount of study and investigation nor is it for the reason that my experience in catarrhal pneumonia has been in any way unique.

But rather for the reason that on account of an unusual, if not unprecedented epidemic of measles, our attention has been called to that subject to an unusual extent the past few months; and again, for the reason that I would like to introduce a subject, the discussion of which, might bring out practical thoughts from the experience and knowledge of the practitioners present, that will enable us to do something more effective for the little sufferers from a dreaded disease than we have done heretofore.

I do not care to discuss the pathology of the disease under consideration only in a general way, because it has very little bearing on the other points I wish to bring out; nor do I wish to speak of the etiology but to mention the variety of causes that seem to produce the disease or morbid condition we are discussing. But I do wish to emphasize the fact that the treatment of catarrhal pneumonia is altogether inadequate, that our methods are inefficient, and that the success of our treatment of the disease depends more on the providence of God than it does on the best skill we can bring to bear on the care of the little patients.

I say little patients for by far the great majority of these affected with the disease are small children; though in an epidemic of measles, such as we have had in our community this spring, some young people and even grown men and women have had the distinctive signs and symptoms of a catarrhal pneumonia following an attack of measles.

Speaking of the pathology, it is probably pertinent to say that I include in the subject catarrhal pneumonia or bronchopneumonia that closely associated and always present trouble called capillary bronchiolitis. Many authors describe them as one and the same disease tho' some authors and investigators seem to make of them two distinct diseases, tho' difficult to differentiate between them, especially during early stages of the trouble.

One author states that when in a suspected case the temperature varies for from 24 to 48 hours, between 102.2. and 104. F., other conditions such as angina, exanthemata, abscess of middle ear, etc., that might cause such a temperature being excluded, the condition is almost certain to be catarrhal pneumonia instead of a capillary bronchitis. That is in my opinion, he would call the severer forms of the trouble a pneumonia, while the milder attacks, simply a bronchiolitis, symptomatically a distinction with very little difference, but as to pathological anatomy, two very

distinct affections.

Given a case of bronchial catarrh, following an attack of measles, whooping cough, influenza, diphtheria, or coming as a primary affection, in which there is a gradual rise of temperature, a tightening of the cough, a marked acceleration of pulse and respiration, perhaps a pain in the chest, a lessening of the expectoration or bronchial secretion, a distressed expression, a flushed face, perhaps a slightly cyanotic appearance of the skin and lips after a time, great restlessness, an evident effort at inhalation, dyspnoea, with dilated nares and depressions between the ribs, and the physical signs of a simple bronchial catarrh with large loose, moist, rales changing to fine, sticky, crepitant or subcrepitant rales, possibly some dullness over lower lobes on either side, or even a more tympanitic note on percussion, the fremitus probably increased, and you have a catarrhal pneumonia or capillary bronchitis, you don't know which, you know you have a very sick child, if it gets better inside of 24 to 36 hours and the temperature gets down to 100, you call it a capillary bronchitis, if the temperature stays above 102 for two days or over, you call it catarrhal or bronchopneumonia; if the child recovers you never know which it has had; if it dies and you can secure an autopsy and get a section of the diseased lung, you may be able to ascertain by minute examination, whether the inflammation was confined to the bronchioles, or whether the catarrhal inflammation extended into air cells themselves, and thus you make a correct diagnosis.

In regard to the etiology, I wish to mention that broncho pneumonia, as Feer says, "is not a disease *Sui generis* as is croupous pneumonia, but is a secondary manifestation, which like the causative bronchiolitis may occur in connection with different kinds of affections" as measles, whooping cough, grip, influenza, diphtheria and any inflammatory diseases of the upper air passages.

In small children some of the worst cases I have had to treat have developed independently of any disease other than an acute cold or bronchitis.

There seems to be no specific germs that produces the disease, but a variety of micro-organisms have been found in the bronchial tubes and secretions in cases of catarrhal pneumonia, the most common being the pneumococci, pneumobacilli, staphylococci, tho' the specific germ of the accompanying disease is often found, as the diphtheria germ, influenza germ, etc. It is thought by some authors, that the disease is, in some forms, contagious.

In the handling of this disease, prophylaxis is the main thing to emphasize, for while we may prevent a good proportion of the

cases we cannot, it seems treat the disease with any great degree of success.

As the majority of fatal cases occur before the end of the third year we should advise the parents to keep the children from taking measles or whooping cough, until the child is 4 or 5 years old and keep every one suffering from a cold, influenza or sore throat, away from the babies.

And now this leads up to part of the subject I mainly wished to discuss, viz., the handling or treatment of catarrhal or bronchopneumonia and capillary bronchitis. I am almost compelled to say that in the cases I have attended, or seen in connection with other physicians, the various treatments carried out have availed very little at most, and I believe with proper hygiene, good nursing and control of the higher temperature with cool applications, proper attention to diet and little or no medication, the little patients would have fared just as well and equally as many would have recovered.

This may be stating it too strongly, for I have seen some extremely sick cases, tided over with stimulants at the proper time, ultimately recover, who would probably have perished if they had not received the proper medical attention at the proper time.

I do say tho' that our most skillful, modern treatment is inadequate and that it is practically entirely symptomatic; that as great a proportion of cases recovered from the symptomatic and, I might say, voluminous treatment of our fathers as from the treatment of the most skillful specialist of today; and finally that better results might be obtained in many cases, if we did not try to do too much for them.

In studying the works of authors of about 35 to 40 years ago, we are at a loss to know just what disease or diseased conditions, they would include in our term catarrhal pneumonia. They did not use the term extensively, but described under the head of pneumonia, bronchitis with collapse of lung (atelectasis,) secondary bronchitis, or pneumonia following other diseases, just such symptoms and signs as we meet in these cases we call catarrhal pneumonia; and for that reason,—the difference in nomenclature and classification—it is hard to figure out just what proportion of the cases if catarrhal or bronchopneumonia recovered.

One author says that in 1862, Barthez stated, "that during the previous 7 years, having abandoned the use of depletion in pneumonia of children, he had treated 212 cases with a loss of but 2 patients. "This statement was taken from a work on dis-

eases of children under the section devoted to pneumonia. If the cases were all croupous pneumonia it surely is a marvelous record for any or every period of time or method of treatment.

Mergs and Pepper states, that in 65 well marked cases of lobar pneumonia, only two were fatal. They state also "that pneumonia, when it attacks children under 2 years of age it is always dangerous, more so when secondary than when primary."

I ought to say that in the cases of Barthez cited, a subsequent paragraph points out that he "takes care to eliminate the lobular or generalized pneumonias, the pseudo lobar pneumonia, the bronchopneumonias and catarrhal pneumonias, also the congestion occurring in low fevers and the secondary lobar hepatizations. Evidently, "says the authorities quoted, "the eliminations were the source of the success obtained by Barthez in his expectant or restorative methods of treatment."

The age of the little patients has had a great deal to do with the mortality of bronchopneumonia in the past as well as the present time.

Keating in 1886 said "that Meinssen lost 50 % of his cases under one year of age, 40 % under 3 years of age 25 over 3 years of age.

Bouchut lost 33 out of 55 under 2 years of age." These cases were evidently cases of genuine catarrhal or bronchopneumonia and is in accord with the estimates of mortality today.

"Estimates of mortality differ because of the various pathological conditions with which the disease is associated. Of 325 cases from various sources, the only qualification to be included in the list being age-under 10 years —there was a mortality of 48.3 %."

Briefly, the treatment advised for that period was the cotton jacket; outward applications to be avoided; treat coughs with sedatives early, later care should be exercised in the use of opiates; expectorants advised, ipecac used as emetic early, if there is dyspnoea, later small doses as expectorant; first stage, calomel purge; later stage and in bad cases, stimulants; good food, cod liver oil and iron.

Dr. Feer of Basle, Switzerland, in a work published recently states that, "The younger the child the less is the chance of recovery, that during the first year more than $\frac{1}{2}$ of the cases die."

He says, "the treatment of bronchiolitis and bronchopneumonia is practically the same." Of the numerous remedies employed, he regards the chest compress, baths, stimulants, inhalations of oxygen, and thorough moistening of the air, as the most

important. In acute cases wet compresses and luke warm baths in the beginning prove most effective.

"In high temperature cases, chest compresses at room temperature, which is kept at 66 to 68 degrees F. applied every $\frac{1}{2}$ hour during the day, and in addition, luke warm baths temp. 93 to 89 is given night and morning, rubbing the skin especially the arms and legs, during the bath, fore head and face being sponged with cold water.

If discomfort, cold skin and cyanosis occur after use of compresses, use only warm bath 98 to 100. Koplik recommends baths at temp. of 105 to 106°. Renault praises hot baths for 15 minutes, twice daily, from onset of disease and claims that the pulmonary congestion is reduced thereby. Huebner recommends the mustard pack as soon as the broncholitis is diagnosed. Patients remain in pack from 10 to 30 minutes, or until he is as "red as a lobster," then cleansed with warm water or given warm bath and kept from $\frac{1}{2}$ to 2 hours in long moist pack to keep up the hyperæmia of skin, then bathed again, dried and allowed to lie quietly; this procedure carried out not more than once a day." It is said to reduce the congestion of the internal organs and therefore, the inflamed lungs.

"Fever requires no medication other than the baths, tho' quinine in small doses per rectum may be given."

"At onset of disease a vigorous expectorant may be given. In cases of failure of respiration and weakness, stimulants as camphor and caffeine may be employed. If digestion becomes disturbed, discontinue all medicine by stomach and give the camphor and caffeine hypodermically. Narcotics often act deleteriously by diminishing expectoration. For purposes of emptying the bronchi, an emetic, e. g., ipecac, is recommended, in the early stage of a violent bronchiolitis. Inhalations of oxygen, in case of severe dyspnoea, as soon as cyanosis occurs, if used freely and frequently, in cases where the bronchi are open and no extensive bronchopneumonia is present, gives good results according to some authorities. Stimulants should be given early. Beef tea, bullion, tea, coffee, as an addition to milk are to be considered first, later, caffeine and camphor, and finally in protracted cases digitalin."

"In convalescence, quinine and iron, phosphorus, and cod liver oil, in appropriate cases are to be used."

Thus I have given the therapy according to a modern authority. and thus we see that while the tendency is toward a rational therapy, it is still symptomatic and far from being effec-

tive; and while the modern treatment tends toward a greatly diminished variety of drug medication and a much more rational method of treatment from the physicians stand point, aiming at conserving the child's vitality and strength, keeping up the strength with nutriments and stimulants, using medicines mainly to counteract the worst symptoms as they arise until the child wears out the disease or vice versa. The authorities seem to advise that the physician turn over the active treatment of the case to the nurse, who must be skillful and of good judgment, to carry out intelligently the system of baths, packs, feedings, and stimulations necessary to combat the disease.

Seriously tho' we have seen, that with all the advancement in the treatment of the disease, catarrhal pneumonia, and its correlatives, capillary bronchitis, bronchiolitis, bronchopneumonia etc., about as many fatalities in proportion occur, as resulted in the days when the whole pharmacopœia was employed, in frantic endeavors, to find something that would benefit or cure the patients.

Hence, I reiterate, that prophylaxis is the thing to strive for in this disease.

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THE MEDICAL SCHOOL OF THE UNIVERSITY OF KANSAS.

MERVIN T. SUDLER, M. D., Lawrence, Kansas.

THE STATE AND PROFESSIONAL SCHOOLS.

The state of Kansas has been committed to a broad educational policy from its foundation. This is shown not only by the liberal support of common schools, but by the establishment of colleges and professional schools. For instance its School of Agriculture, Mechanic Arts, Veterinary Medicine, etc., at Manhattan; its Normal School at Emporia; and its Schools of Law, Electrical, Civil and Mining Engineering, Fine Arts, Medicine and Education at the State University at Lawrence, etc. So, the question of the state conducting professional and technical education is settled.

BEGINNINGS OF THE MEDICAL SCHOOL.

The Medical School is one of the last to be completed in organization, but it is mentioned in the constitution of the state as a part of the university. Every other profession was represented by a school when the full medical course was finally inaugurated. The beginnings of the present medical school, however, date from 1880, when the University started a preparatory course for prospective medical students. In 1889 the first two years of medi-

cal work was given. In the next few years, several attempts were made to complete the school and add the last two years to the course. Of these attempts, a plan to place the last two years work in Topeka seemed the most likely to succeed, but this finally failed.

ESTABLISHMENT OF THE FOUR YEARS COURSE.

It was not until 1905, when the University accepted a gift from Dr. Simeon B. Bell of Rosedale, of money and land to be used in connection with the medical school, that the four years course was established. At this time the University did not have sufficient funds for salaries of clinical teachers, and its resources for charity cases in its own hospitals were limited. It was therefore compelled to depend upon the men in the neighborhood of the school who would give their time as teachers, and on the hospitals which extended valuable clinical privileges to the school. Some of the teachers lived on the Missouri side of the line, and owing to the geographical position of Rosedale, the hospitals of Kansas City, Missouri were used to considerable extent. The University has been subjected to some criticism for accepting this help from Missouri. But it was the only arrangement possible, and by it, the University secured the services of many eminent men, and splendid hospital facilities, particularly, in the Kansas City General Hospital, that would otherwise not have been available for its students.

WHAT THE SCHOOL HAS ACCOMPLISHED.

Since the organization of the school in 1905, it has graduated 131 physicians. Fifty seven in 1905, twenty nine in 1907, eighteen in 1908, seven in 1909, and twenty in 1910. The entrance requirements have been raised from the high school basis to two years college work. This corresponds with the entrance requirements of the better schools of this country. The class of students which have so far enrolled in the school give every encouragement to expect the greatest success in the quality of the men that it will graduate, and the aim of the school has been to produce thoroughly trained men rather than numbers.

The work given so far has been of excellent quality. However, with the establishment of University standards for entrance, and in the first two years work, it became necessary to put the clinical work on the same basis, and this was found impractical in certain ways with the entire school located at Rosedale. So it has been found necessary to reorganize it on the broadest possible basis.

WHAT CONSTITUTES A SCHOOL OF UNIVERSITY GRADE.

Before giving the plans of this reorganization and the methods by which they were made, it may not be out of place to state briefly the standards which are demanded of a medical department of the modern University:

1. The University must control all or part of the time of its teachers in both scientific and clinical branches. This means that they must be salaried.

2. Teachers in charge of the Scientific branches of the first two years must be specialists, and devote their entire time teaching or research in their subject. This applies to Anatomy, Physiology, Bacteriology, Pathology, Chemistry, and Pharmacology.

3. The School must control the clinical facilities of its own or other hospitals as it does its laboratories for Chemistry, Biology, etc., so that accurate histories may be kept, clinical examinations made, and the student may follow all of this work in every case, from the time it enters the hospital to the time it is discharged, and not simply see an isolated operation, or patient without any relation to previous conditions, or symptoms. It can not rely on the old fashioned haphazard clinics of voluntary teachers for its instruction.

4. Good journals and literature must be provided in sufficient quantity. These together with accurate records of every clinical case, in a few years form an invaluable addition to teaching and research.

5. It must have sufficient laboratories and equipment to keep pace with the increasing demands of medical education and preventative medicine.

PLANS FOR THE FUTURE.

When an attempt was made to reorganize the school, three definite needs of the state were found to exist which had a bearing on a medical institution, and it seemed that it might be possible to combine these various medical agencies to some extent so they could be more effectively and economically administered.

The State needs:

1. A medical School by which it can supply educated physicians to its citizens, and aid in maintaining the highest standards of medical practice.

2. Laboratory work for the State Board of Health. As a great deal of this work requires the special training and equipment which are found in a good school; the teachers and laboratories could be used in the wider field of preventive medicine for the entire state as well as for teaching.

3. Aid for the medical profession of the state by provid-

ing laboratories where the more delicate and complicated examinations could be made at the minimum cost, and by providing libraries and laboratories where physicians may study or review any subject of special interest to them and by the establishment of a state hospital to take care of a portion of the charity work which should be cared for by the public, but which now is a burden to the doctor.

The university had already undertaken all the work outlined in the first paragraph. It has already been doing all of the examinations outlined in the second paragraph, except some bacteriological work. It has made some examinations for physicians as outlined in paragraph three, but it has been impossible to do much of this work on account of lack of facilities. In planning for the increase and coordination of this work, the heads of all the great schools of the country and others known as experts in medical education have been consulted. Our State Society, at Chancellor Strong's request, appointed an educational committee of five men.

To this committee, ten names were added, making fifteen in all.

The combined committee held a meeting in Lawrence in the fall, to discuss plans for the development of the school. Preliminary plans were outlined, and the most important questions embraced in these were submitted to every physician in the state by means of a circular letter. The replies received have been carefully tabulated, and are the basis for the plans now outlined.*

SUMMARY OF PLANS COMPLETED AT THE PRESENT TIME.

The plans so far approved by the Board of Regents of the University and made after this extended consultation are based upon the principles outlined before. That is, the legislature has been asked to appropriate enough money to build a hospital which the University can control. It has also been asked for money to pay salaries to the teachers in the most important clinical branches, so that the University can control their time. The legislature will also be asked to pass a bill providing for our county and city health officers sending such patients as need hospital treatment and such children as are born deformed, and liable

*The Board of Regents after carefully considering the relative advantages of Topeka, Lawrence and Kansas City decided that the latter place would give the greatest opportunity for developing a medical school of University Grade. This action was not taken until January 5th, after the accumulation of exhaustive evidence and the widest advice from the profession of the state, and medical educators of note over the country.

to become a charge to the state, to the State Hospital for free treatment; the counties or cities to bear the expense of the maintenance of such patients while they are in the hospital.

The University paid the expenses of the men invited, but the auditor limited the number to fifteen.

In order to conduct the work of the State Board of Health and the medical school more economically and efficiently, various conferences have been held between the Board of Regents and the members of the Board, and they have practically agreed upon a union of the two state functions, by making the administrative head of both departments the present secretary of the State Board of Health. The plans so far have not been completed, and it is the desire of the university to conduct a medical department of university grade, and eliminate local jealousies and personal ambitions of any particular individual, so that for this reason every phase, and every proposition made has been considered with great care.

OPPOSITION TO THE SCHOOL.

In a recent interview doubt has been expressed whether there is sufficient demand for a medical school in the state to warrant its support. It has been suggested that its clinical years should be abandoned. As to the need of the medical school. The graduating class for 1910 numbered twenty, the entering class this fall, thirty, the total enrollment for the year is 83. In the medical department of Washington University at St. Louis which has recently been reorganized, and large sums of money spent in its improvement, the entering class numbers twelve. Cornell, one of the largest universities in the country, has an entering class of twenty seven. And the state University of Michigan, which for years has conducted the largest and most widely known medical school of any state university had an entering class of forty students last year.

Enrollment in the Medical Schools of the leading state Universities.

University.	1st yr.	2nd yr.	3rd yr.	4th yr.
University of Minnesota.....	49	51	37	31
University of Michigan.....	58	39	104	60
University of Iowa.....	23	26	44	23
Washington University, St. Louis	12	38	41	35
University of Kansas.....	30	18	16	19

So when we compare the population, there seems to be more demand for university medical education in this state than in the neighboring states.

OTHER SCHOOLS AND THE VETERINARY COLLEGE.

So far, the desirability and usefulness of the schools of Law, Engineering, Agriculture, or Veterinary Medicine to the state have not been questioned. In other words, as far as medicine is concerned, veterinary medicine is to be well supported and properly so. The cattle, hogs and mules of the State of Kansas will not be left without proper medical care, but its human population will get along the best it can on an accidental and weak policy of medical education without any state control, if some of the suggestions that have been made are carried out.

WILL MEDICINE BE THE ONLY PROFESSION WITHOUT A SCHOOL SUPPORTED BY THE STATE?

The legislature meeting this winter will decide by its appropriation whether the medical profession will be the only profession without any provision for training and education, in the educational system of the state, or whether it will possess a school under the control of the State University with sufficient resources to meet the demands of decent medical education. And the University cannot conduct a medical school on the old haphazard plan that has been in vogue in the proprietary schools. Only University methods as recognized by the American Medical Association and the Carnegie Foundation can be used.

Whether the legislature will act favorably on the question or not, depends on the medical profession of the state. If the profession wants such an institution then it must make this want felt throughout the state and especially through the members of the legislature representing the various counties. The advice of the entire profession has been asked in making these plans. And, in fact, the directing and controlling influence lies with it. And while the school has accomplished much in the past its future success, now depends largely on the support and approval of the profession of the state.

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Prostatic massage for gonorrheal prostatitis is not limited in its usefulness to chronic cases. In some cases of fairly acute gonorrheal prostatitis the symptoms do not abate until daily expression of the pus by massage is undertaken, and then they subside very quickly. Such a treatment must be undertaken only upon proper indications, however; otherwise employed in acute cases it will cause mischief.—American Journal Surgery.

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A malarial seizure, accompanied by vomiting and abdominal pain may simulate appendicitis, chole-cystitis, or other acute intra-abdominal lesion. A leucocytosis even of 20,000, does not gainsay the malarial diagnosis.—American Journal Surgery.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY,

EDITOR.

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

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The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1909, it incorporated the Wyandotte County Medical Journal, owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

LIST OF OFFICERS.—President, O. P. Davis, Topeka; 1st Vice-President M. F. Jarrett, Ft. Scott; 2nd Vice-President, J. T. Artell, Newton; 3rd Vice-President, G. W. Jones, Lawrence; Secretary, Chas. S. Huffman, Columbus; Treasurer, L. H. Munn, Topeka; Librarian, S. G. Stewart, Topeka.

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EDITORIAL

Self-depreciation is ones own enemy.

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Calloused hands are not a badge of the "walking delegate."

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Genius does not hide herself for any great length of time.

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The successful ones early strike out of their vocabulary the word carelessness.

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While there can be no argument advanced for the poorly equipped medical school, it is amusing to look over the list of the foremost practitioners and find the school from which some of them graduated, "torn to pieces" as it were by Mr. Abraham Flexner in his Carnegie Foundation Report. It makes us stop to think, it is as much the school as is it the man?

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The Comparative Danger of Ethyl Chlorid as an Anesthetic.—Horatio C. Wood, M. D., (Journal A. M. A., Dec. 24, 1910.) comments upon the dangers of this anesthetic and says that it is 200 times as dangerous as nitrous oxid gas. He says that it should not be classed with ether on account of the anesthesia being of but a few moments duration while that of ether being much longer. However the mortality in his statistics show an average of 1 in

15,000 for ether, to 1 in 5,710 for ethyl cholrid. He condemns it use by inexperienced and untrained persons who give it with a feeling of security (false) thinking it is much less dangerous than nitrous oxid gas. In the light of this knowledge it would seem that when a general anesthetic of a few minutes duration is required nitrous oxid gas is much safer.

With the beginning of the New Year it is well to call the attention of the society to the Journal. To make it a success is the aim, or should be, of all the members, for it depends for its very existence upon your will. In the first place to serve its purpose the Journal should have the combined support of all, even in the smallest details. The papers read at the annual meeting as well as those from the District and County Societies of scientific interest, help to make the Journal what it is. Again reports of meetings, news notes and items of clinical interest are no small factors in supplying its columns with readable matter. Kansas is not behind in its scientific advances and it behooves us to keep outsiders informed.

Therefore with the New Year let us all pull together and open the eyes of the East as well as those of the West to the progress of medicine in Kansas.

SOCIETY NOTES.

The Riley County Medical Society met December 8, 1910, at Dr. Littles office in Manhattan, Kansas, with the President, Dr. J. D. Colt in the chair.

Papers were read by Dr. Robert Leith, and Dr. C. B. Tepler.

The following officers were elected for the coming year.: President, Dr. J. C. Montgomery, Vice-President, Dr. B. Belle Little; Secretary Dr. J. C. Wilhoit; Treasurer, Dr. C. R. Tepler; Censor, Dr. T. R. Cave.

B. BELLE LITTLE, Secretary.

The Montgomery county medical society met in office of Dr. Pinkston, Dec. 13, 1910.

The following officers were elected for 1911:

Dr. Geo. M. Seacat, Cherryvale, President; Dr. J. N. Strawn, Elk City, Vice-president; Dr. J. A. Pinkston, Independence, Secretary and Treasurer. After regular routine of business the doctors their wives or sweethearts, attended the Annual Banquet at Carl Leon Hotel. There were forty present.

At the Annual meeting of the Wyandotte County Medical

Society held December 20, the following officers were elected:

President, James W. May, Vice-President, L. Leverich;
Secretary, J. A. Fulton, Treasurer, Anna Masterson Roberts.

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The Golden Belt Medical Society held their regular meeting at Topeka, Thursday, January 5, 1911. The following program was given: Treatment of Gonorrhoea, Dr. W. S. Yates, Junction City; Pelvic Abscess in Women, Dr. Robert Leith, Manhattan; Appendicitis, Dr. W. E. Mowery, Salina; Something About Otitis, Dr. C. L. Zugg, Kansas City.

L. O. NORDSTROM, Secretary.

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The Western Kansas and Norton Decatur Medical Societies met at Goodland, Kansas, December 15, 1910. The following program was given:

Morning Session. 10 a. m.

Embolism of the mesenteric artery, Case Report, H. O. Hardesty, Jennings, Kansas; Discussion C. S. Kenney, E. J. Beckner.

Displacements of the Uterus, E. L. Davis, Dresden, Kansas; Discussion, F. A. Carmichael, V. C. Eddy.

Afternoon Session. 1:30 p. m.

Cholecystitis, Etiology and Pathology, F. A. Smith, Goodland Kansas; Discussion, I. L. Parker, Albert Jefferies.

Cholecystitis, Diagnosis and Treatment, Wm. C. Lathrop, Norton, Kansas; Discussion N. H. Norrish, F. R. Funk.

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The Elk county medical society met at Dr. Clinton Beasley's office, Moline, Kans., November 29, 1910, for the purpose of election of officers for the ensuing year, and to transact other business of interest to society.

The old officers were re-elected for another year beginning January 1, 1911 President, J. F. Costello, Howard; Vice-Pres. J. L. Hays, Howard; Secretary and Treasurer, F. L. De Pew, Howard; Delegate to state society, G. H. Grumell, Howard.; censor, 1 year, A. J. Long, Elk Falls; 2 years F. K. Day, Longton; 3 year Burgess B. Mason, Genola.

Vernon P. Booth, Moline, was elected to membership of society.

Paper, "Reminiscence of Old Time Practitioner in Old Dark County Ohio", his father being central figure, by J. L. Hayes.

Members present: Dr. A. J. Long, Elk Fall; Vernon P. Booth, Moline; J. F. Costello, J. L. Hays, W. C. Trowbridge, G. H. Grumell and F. L. De Pew, all of Howard.

The meeting was interesting and very profitable to all present.
F. L. DE PEW, Secretary.

NEWS NOTES

Dr. O. J. Furst of Peabody, who was president of the Kansas Medical Society 1909-10 has moved to Glendale, Calif., a suburb of Los Angeles. He will rest a year or two before he again enters the practice of medicine. He invites all the "Boys" to visit him and says the latch string will always be out for the doctors of Kansas and especially so during the next A. M. A. meeting in Los Angelus. We hate to give up the doctor and wish him all the happiness possible.

The Northwestern University Medical School, Chicago, has received a gift of \$200,000 from Mr. James A. Patten, to endow a chair of medical research.

The National Confederation of State Medical Examining and Licensing Boards will hold its Twenty-first Annual meeting in Chicago, Ill., on Tuesday, February 28th, 1911, at the Congress Hotel.

The subjects to be taken up at this meeting will be a consideration of the state control of medical colleges; a report by a special committee on Clinical Instruction; a report on a proposed Materia Medica List by a special committee; the report on a paper presented at the St. Louis meeting, by Mr. Abraham Flexner of The Carnegie Foundation for the Advancement of Teaching; and some special papers on such subjects as the Regulation of Medical Colleges. Necessity for Establishing a National curriculum for the Medical Degree, and others, by men eminently qualified to prepare papers upon such subjects.

An earnest and cordial invitation to this meeting is extended to all members of State Medical Examining and Licensing Boards, teachers in Medical schools, colleges and universities, delegates to the association of American Medical Colleges, to the Council on Medical Education of the A. M. A., and to all others interested in securing the best results in medical education.

The officers of the confederation are, Pres. C. Guernsey, M., D., 1923 Chestnut St., Philadelphia, Pa; Secretary-Treasurer George H. Matson, M. D., State House, Columbus, Ohio.

The Northeast Kansas Medical Society will meet at Topeka,

Kansas, February 9, 1911.

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Charles Victor Haggman, M. D., of Concordia, was married November 2, to Miss Clementine Creager, of Kansas City, Mo.

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Office of Reporter, Sumner County Sunday School Association.
Caldwell, Kansas, December 20, 1910.

Dear Sir—At the 27th Annual Convention of the Sumner County Sunday School Association, held at Caldwell, Kansas, November 30th and December 1st, 1910, the following resolutions were discussed and unanimously adopted:

"Believing that a sound national physique is of greater importance than a sound national finance.

We favor the establishment of a **National Department of Public Health** and urge our representatives in Congress to vote for same.

We furthermore urge our representatives in the Kansas Legislature to support the 'vital statistics bill' and the 'antituberculosis appropriation', and all other measures which will continue the good work of the State Board of Health and thus increases the physical welfare of the people of this great state."

Trusting to have your assurance of your hearty cooperation and support, I am,

Respectfully yours,
REV. J. A. BARTHOLOMEW, Reporter.

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Office of Counsellor Sixth District, Kansas Medical Society.
Wichita, Kansas, December 20, 1910.

Dear Sir—At a meeting of the physicians of the Sixth Counsellor District of the Kansas Medical Society, embracing the counties of Pratt, Barbour, Kingman, Harper, Sedgwick, Sumner, Cowley, Chautauqua and Elk, said meeting being held at Wellington, Kansas on December 1st, 1910, the following resolutions met with unanimous approval and adoption:

"We, the physicians of the Sixth Counsellor District of the Kansas Medical Society assembled at the City of Wellington, December 1st, 1910, heartily endorse Senate Bill 6049 introduced by Sen. Robt. Owen of Oklahoma, February 1st, 1910. in the Senate of the U. S. "for the Establishment of a Department of Public Health and for other purposes" and recommend all of our Members of Congress from Kansas to support and vote for same. We especially call their attention to the fact that it contains no reference to 'medical practice' and will not in any measure restrict the practice of any method, 'cult' or 'pathy' in the treat-

ment of disease, notwithstanding assertions by certain individuals to the contrary, whose real opposition is undoubtedly based on financial or other selfish motives. We believe the "Prevention of Disease" to be paramount to all treatment and that in the establishment of a department to accomplish this prevention the U. S. should lead and not follow all the other Nations of the earth; and furthermore that Kansas always recognized as a leader of every good reform, shall maintain this long sustained reputation by the vote of our Members of Congress for this bill."

Counsellor for Sixth District was furthermore instructed to forward same to each Member of Congress from the State of Kansas.

Trusting we may have your cooperation and support on this measure, I remain,

Very respectfully,
ARCH D. JONES, Counsellor.

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Belle Plaine, Kans., Dec. 20. 1910.

Dear Sir—As secretary of the meeting of the physicians of the Sixth Counsellor District of Kansas Medical Society, I am instructed to forward you the following resolution:

"We, the physicians of the Sixth Counsellor District Kansas Medical Society, embracing the counties of Pratt, Barbour, Kingman, Harper, Sedgwick, Sumner, Cowley, Chautauqua and Elk, at a meeting held in the City of Wellington, Thursday Dec. 1st. 1910, hereby endorse the standard 'Vital Statistics Bill' offered the Kansas Legislature of 1910, and also an 'Anti-Tuberculosis Appropriation Bill' so necessary to carry on the fight for the prevention and extermination of Tuberculosis, and recommend them to the attention and approval of the Members of the Legislature for 1911; furthermore we request all the members of the Legislature and especially those from the counties above mentioned to work and vote for these measures, and all other health measures so necessary to carry on the present good work of the Kansas State Board of Health and its assistants, the Public Health Officers."

Trusting to receive your assurance of your hearty cooperation and support, I am,

Respectfully,
JOHN J. SIPPY, Secretary.

The above is a copy of the letter mailed to every Member of the Legislature of Kansas.—Editor.

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At the Annual Banquet of the Academy of Medicine, held in Kansas City, Mo., January 12, 1911, Dr. Joseph Collins of New

York was guest of honor.

The American Proctologic Society's Prize for the Best Original Essay on Any Disease of the Colon by a Graduate of (not a Fellow of the Society), or a Senior Student in any Medical College of the United States or Canada.

The American Proctologic Society announces through its committee that the cash sum of \$100, will be awarded, as soon as possible in 1911, to the author of the best original essay on any disease of the colon in competition for the above prize.

Essays must be submitted, to the secretary of the committee, on or before May 10, 1911. The address of the Secretary is given below, to whom all communications should be addressed.

Each essay must be typewritten, designated by a motto or device, and without signature or any other indication of its authorship, and be accompanied by a separate sealed envelope, having on its outside only the motto or device contained on the essay, and within the name, the motto or device used on the essay, and, the address of the author. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays, if reclaimed by their writers within six months, provided return postage accompanies the application.

The committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

The competition is open to graduates of medicine, (not fellows of the society), and to members of the senior classes of all colleges in the United States or Canada.

The object of the prize and competition is to stimulate an increased interest in, and knowledge of Proctology.

The committee shall have full control of awarding the prize and the publication of the prize essay, and it shall be the property of the American Proctologic Society. It may be published in the Transactions of the Society and also as a separate issue if deemed expedient. The committee may increase its membership if deemed advisable.

DR. DWIGHT H. MURRAY, Chairman,

DR. LEWIS H. ADLER, Jr., Secretary, 1610 Arch St., Philadelphia, Pa.

DR. SAMUEL T. EARLE, DR. JEROME M. LYNCH,
DR. LEWIS H. ADLER, Jr., DR. ALOIS B. GRAHAM,
Secretary, 1610 Arch St., Philadelphia, Pa.

Communications.

Burr Oak Kansas,, 12-5, 1910.

Editor Kansas Medical Journal, Kansas City, Kans:

Dear Doctor—I inclose a city ordinance, it is intended to shut out a lot of fakers that go from town to town and work on the credulity of the public and are a disgrace to the profession. The next advertising doctor that lands here will have a chance to test it. Our county has been cursed with them of late, and I believe we will keep them out of this town in the future.

Yours truly,

J. E. HAWLEY, M. D.

(Published in the Burr Oak Herald, December 1st, 1910.)

Ordinance No. 155.

Relating to License for Transient Merchants, Traveling Doctors, Opticians and Itinerant vendors of medicines, and other things competing with the business in the City limits, Be it ordained by the Mayor and Councilmen of the City of Burr Oak, Kansas,

Section One.—That it shall be unlawful for any person, persons, Corporation or Company, Itinerant Venders of Medicine, Optician or Traveling Doctor to come into the corporate limits of the City of Burr Oak, Kansas, and occupy any building or part with another for the purpose of temporarily vending anything or practising their profession without first paying a license therefor.

Section Two.—That the license for such Person, Persons, Corporation or Company shall be twenty-five (25.00) dollars per day for every day such person, persons, Corporation or Company shall do business within the Corporate limits of the City of Burr Oak, Kansas.

Section Three.—That the manner of paying such license shall be as follows, any person, persons, corporation or company desiring to vend or practice anything within the corporate limits of said City of Burr Oak, Kansas, shall apply to the City Clerk therefor and pay to such clerk the license fee, together with the Clerk's fee as now provided by ordinance at which time the City Clerk shall issue the required license sealed with the City Seal and deliver the same to the purchaser.

Section Four.—That any person, persons, corporation or company, traveling physician or optician violating any section of this ordinance shall be fined in a sum of not less than twenty-five dollars nor more than one hundred dollars.

Section Five.—That this Ordinance shall be in force and

take effect immediately on and after its publication in the Burr Oak Herald.

J. E. HAWLEY, Mayor.

Passed November 29th, 1910. Approved November 30th, 1910.

(Seal) Attest:

J. W. GREEN, City Clerk.

Obituary.

Jett Theodore Keith, M. D., Keokuk (Iowa) Medical College, 1901; died at his home in Wichita, Kan., November 30, aged 36.

William B. Hardy, M. D., Jefferson Medical College, 1856; died at his home in Belleville, Kan., December 6, aged 78.

Sarah Grattles Hiatt (license, Kansas, 1870; Texas, 1892); of Mound City, Kan; died at the home of her niece in Kansas City, Mo., November 2, from peritonitis, aged 72.

Samuel E. Martin, M. D., Electic Medical Institute, Cincinnati; 1852; a pioneer practitioner of Kansas; surgeon of the Fifteenth Kansas Volunteer Infantry during the Civil War; died suddenly at his home in Topeka, December 8, from heart disease, aged 84.

MISCELLANEOUS

In a hunting magazine a few weeks ago, the following amusing advertisement appeared: "Opportunity to hunt a good stag is offered to a well-known authority in diseases of women. As compensation it is required to make a correct diagnosis of the case of my wife during his stay at the hunting lodge." It is not known whether he has found a gynecologist to undertake the task.—Berlin Letter Journal, A. M. A.

Life, in a recent issue, had the picture of an experimental physiologist being stoned by an ignorant and brutal mob, issuing apparently from the back door of the infernal regions. The cartoon is deservedly severe on the mushy and disingenuous antis, but it apparently represents a remarkable change of viewpoint on the part of the publication.—N. Y. Medical Journal.

A distinguished teacher of medical jurisprudence reminds us that "life begins with conception, and is established with the

first fetal movement." In other words, viability is known to doctors and to mothers by the first "kick." We have frequently noted the same biologic phenomenon in our editorial experience. Often we are given to wondering whether our subscribers really read the things that we print in our journal, or whether our arduous efforts are wasted upon a clientele of dead ones. Then we happen to publish something that treads on someone's toes, or rubs someone's fur the wrong way, and we promptly elicit the sign of viability—a kick. Whereat we rub our hands and grin gleefully and take a fresh hold—not because we have hurt someone's feelings but because we realize that our readers are alive.—Medical Standard.

Wanted.—A physician of good habits and energetic, desires a Kansas location, able to do up to date work in eye, ear, nose and throat field. Has done considerable major surgery. Prefers to assist a busy doctor until ability has been demonstrated.

Dr. Z.—%Journal.

Speed, Boldness and Brilliancy in Operating.—Visitors in surgical clinics are sometimes carried away by the speed and boldness with which some operations has been conducted. Their enthusiasm is often well founded, but occasionally it is furnished chiefly by the distance of the gallery from the operating table, which prevents the display of those errors of technic or judgment that have made the speed possible. If the admiring visitors learned how often the patients of some brilliantly speedy operators suffered with secondary hemorrhage, avoidable infection, disability from injury to important structures or relapses from incomplete operation, their "bold" surgeons would more properly come to be known as "bold bad" surgeons.

Speed without hurry is the accomplishment of the skilled technician who knows what he wants to do and knows how he wants to do it. Boldness is the quality of him who appreciates no less the limits to which he may safely go than the extent to which his individual handicraft can carry him. Brilliancy is the combination of these factors with originality, with the capacity to match quick wits against unexpected conditions and to fit physiological principles into pathological emergencies. Speed, boldness and brilliancy are the desiderata of all operators—the possessions of a few masters. They are factors in the saving of individual lives in the development of new surgical fields. But when speed is mere hurry, when boldness disregards anatomy and flouts surgical

principles, when brilliancy is but the quick move to cover errors of judgment, commend your body to rather the surgeon who is painstaking and deliberate, whose work is not "showy" in the the operating room—nor on the autopsy table!—W. M. B.—Editorial American Journal Surgery.

Radium for England.—Mr. Alton, director of the English Radium Institute, has bought from the Austrian Ministry 1 gm. of radium for \$75,000. This purchase was made on behalf of the well-known Jewish philanthropist, Sir Ernest Cassel, who will present it to the institute. According to the eminent scientist, Sir William Ramsey, a gram of radium is a fifth of the entire quantity in the world. In a previous letter (The Journal Nov. 5, 1910, p. 1658) an important discovery of pitchblende in Cornwall mines, which promise to be an even better source of supply than the Austrian, was announced. It is evident that the Radium Institute, which will soon be opened, will be well supplied with the precious metal.—Journal A. M. A.

At the above price it will probably be some "moons" before we will be carrying an ounce or two around in our vest pockets.—Editor.

General Sherman's Observations Concerning Colds.—A wholesale illutrasion of the effect of outdoor living in preventing colds is contained in a letter of General Sherman to his wife written from Goldboro, North Carolina, during the Atlanta campaign. He speaks of his men, after having passed through the rigors and exposures of that strenuous campaign, and after being equipped with new clothing, as a fine-looking set of soldiers, brawny, strong and swarthy, a contrast to the weak and sickly-looking men who came to him in Kentucky three years before. He observes: "It is a general truth that men exposed to the elements do not catch cold, and I have not heard a man cough or a sneeze for three months; but were these men to go into houses, in a month the doctors would have half of them. Now the doctors have no employment." A writer in the Dietetic and Hygienic Gazette refers to this as a "symptomatic observation worthy of a doctor, but unexpected in so great a general." He says that the general was not making a holiday health speech, but writing a universal cold-cure recipe, for a remedy which is as free as air and as bounteous as the canopy over us, and which any one can procure and use.—Editorial Journal A. M. A.

CLINICAL NOTES

Ocular Chancre.—Chancres of the eyelids may be palpebral or conjunctival. A chancre situated on the ciliary border of the eyelid may be mistaken for a sty. Conjunctival chancre is more often situated on the palpebral than on the ocular conjunctiva, and generally causes conjunctivitis, chemosis, and eversion of the eyelid. Chancres situated at the outer angle of the eye cause enlargement of the preauricular gland; chancres of the inner angle of the eye cause enlargement of the sub-maxillary glands.—C. F. Marshall, in the Practitioner.

Dyspnea in Pleurisy.—Dyspnea is a very characteristic symptom of pleurisy. It is most urgent in those cases in which the exudation occurs most rapidly and it is astonishing the amount of fluid which a pleural cavity may contain without causing much distress of breathing, provided that it takes place gradually. There must, however, be some other explanation than the mere slowness of the exudation, as there are cases in which, even in spite of rapid effusion, the breathing remains unembarrassed. These cases give less anxiety, as the presence of urgent dyspnea is always a grave indication. F. de H. Hall, in the Practitioner.

A convenient and at the same time effective method of treatment of erysipelas is to paint the diseased area with a 25 per cent solution of ichthyol in collodion and a girdle of mercurial plaster about an inch wide applied around the patch. This application will stay on better than other solutions and at the same time is very effective.—Medical Review.

In order to prevent subsequent deformity in palmer abscess the palm should be opened freely and immediately after the diagnosis is made. A general anesthetic is necessary as the dissection should be through, and as the palmar arch crosses on a level with the lower border of the outstretched thumb and has to be carefully avoided, makes a general anesthetic and the use of a tourniquet an absolute necessity.

Make your incision a longitudinal one—the length of the entire palm is necessary.

The after-treatment is almost as important as is the operative. Passive and later active movements should be started just as soon as the suppurative process begins to subside and granulations begin, otherwise contractions and possible ankylosis will result.

Absolute rest in bed, voluminous bandage, wet dressings

and light but nutritious diet are all valuable adjuncts, especially the rest in bed during the active symptoms.—Medical Review.

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The Diagnosis of Twin Pregnancy.—Zentralblatt fur Gynakologie, No. 40, 1910, p. 1281.) (There is no lack of signs says an editorial writer in the Lancet which may indicate the presence of a twin foetation; it is their certain recognition which is so often difficult. The finding of two bags of membranes, the existence of a furrow between the two foetuses, the presence of too many small or large foetal parts, the large size of the abdomen, the apparently excessive length of the foetal axis, and the auscultation of two hearts beating at different rates, while all valuable diagnostic aids, may not be present or their significance may be misunderstood. The diagnosis of a twin pregnancy before labour sets in is a matter of no little importance to the mother and cannot fail to bring credit to the medical attendant. In spite of this, in a very large percentage of the cases the condition is overlooked and any addition to our knowledge therefore which will prevent such mistakes in future is to be welcomed. Dr. C. J. Gauss believes that he has discovered a sign of considerable importance in this connection, and in a paper recently published in the Zentralblatt fur Gynakologie lays stress upon the presence of an anterior parietal presentation in the case of the first of twins when it is presenting by the head, as a point of considerable diagnostic value. As a result of the small size of the head and of the leverage action produced by the second child upon the body of the first, due to the want of space in utero, he maintains that this presentation is to be met with in so large a proportion of twin pregnancies as to render it of great value. In several cases where the diagnosis had proved impossible by the abdomen the presence of such a presentation has led him to the successful recognition of a twin pregnancy. An anterior parietal presentation, corresponding as it does to a marked degree of Naegele's obliquity and associated with abnormally easy recognition of the anterior ear, occurs so frequently in a normal pelvis as to render its occurrence in such conditions most suggestive of a twin pregnancy. This sign has the drawback that it is not available until labour has commenced, and it is, of course, only present when the first child presents by the head, but such a presentation occurs in some 70 to 80 per cent. of all twin pregnancies. It should therefore, if further observations tend to show that it is as constant an occurrence as Dr. Gauss supposes, prove of considerable value in helping to make a diagnosis in doubtful cases of multiple pregnan-

cy. The question is well worth further investigation, and in our opinion this physical sign has only one drawback—namely, it involves for its recognition the necessity for making a vaginal examination, whereas most of the other signs of multiple pregnancy can be recognized when present before the onset of labour and by examination of the abdomen only.—*American Medicine*.

Whooping Cough Treated by Fluoroform.—Dr. Mathilde de Biehler, in *Arch. de med. des enf.*, July, 1910, gives the results of the observation of 232 cases of whooping-cough treated with fluoroform with success. The author claims for this medication that it shortens the attack by some weeks, and renders the attacks of cough less frequent and less severe. Of the patients, 185 were seen at the beginning of the disease, and 117 at the end of two or three weeks. In thirty-eight cases treated from the beginning, in families in which there were already other cases, a cure was obtained in ten to fifteen days. In 186, cure was obtained in three or four weeks; in eight, at the end of seven to eight weeks. In these cases the number of attacks of coughing was much decreased. In eighteen cases there were complications. There were four deaths, two from pneumonia, with meningitis in very young infants, when treatment was not begun until several weeks had passed. The author observed no sublingual ulcers, vomiting, or hemorrhage. Fluoroform is a drug that merits the attention of the practitioner; it is not poisonous, even in large doses, and is well borne by even the smallest children. The author thinks it quite possible that it will prevent the disease, as well as modify its severity. In the case of a woman in danger of abortion from whooping-cough the use of the drug stopped the vomiting and lessened the cough so that the pregnancy went on to term, and the infant was delivered normally. By examining the blood of the little patient it was seen that the leukocytosis that always occurs in this disease began to diminish as soon as the drug was used. The dose of the solution should begin at ten to fifteen drops three times a day and after each attack five to ten drops, up to 200 to 250 per day. It should be increased until the desired effect is obtained.—*Journal New Jersey Med. Ass'n*.

The fact that the right kidney is movable and palpable over its entire extent in over 30 per cent. of women who present themselves for general examination (Bevan), should be always considered before attributing any obscure symptoms that may exist to this condition.—*International Journal Surgery*.

To Promote Granulation in Wounds.—Dr. M. Baruch (Munch. med. Wochensch., No. 35, 1910) reports from Bier's clinic that the following powder has given excellent results in stimulating granulation in wounds and ulcers: Silver nitrate 1.0 kaolin, sterilized, up to 100.0, thoroughly triturated and dispensed in black bottles. Unhealthy wounds covered with pus and fibrinous exudation cleared up with remarkable rapidity, even within one or two days. Necrotic areas rapidly separated, with active production of red, healthy granulations and speedy cicatrization. The effects were particularly striking in cases of burns. The fact that the powder can be applied to infected and dirty wound surfaces is considered by the author as a special advantage over scarlet red ointment. Change of dressings depends upon the amount of secretion, which is generally greatly increased during the first few days. At the beginning the parts are dressed every second day, and later every third or fourth day.—*International Journal Surgery.*

Air Embolism.—This subject, in former years one of vivid interest in laboratory investigation and appearing much in the literature of the time, is now rarely discussed, nor is it seriously dreaded as a complication of operation. The last words on the subject seem to have been contributed by Senn and Hare, the experimental investigation of the latter apparently covering the ground. It was shown by him that small quantities of air entering the veins usually are innocuous; that large quantities usually are rapidly fatal; that the quantity necessary to produce death varies enormously, both in the same species and in the individual. Also, death will be found to be due to cardiac insufficiency, brought about by mechanical causes and respiratory failure. Entering the right ventricle air interferes with the closure of the valve and allows the churning to and fro of a bloody froth. Moreover, there is a distinct impairment in the muscular force of the heart as a pump.—*Therapeutic Gazette.*

It is stated that the application of the tincture of blood-root to surfaces poisoned with ivy will immediately relieve the itching and burning, and will quickly cure. And so will alcohol, we may add. Is it not the alcohol in the tincture that accomplishes the result and not the sanguinaria? At all events, the result is the same, and the former is cleaner.—*American Journal Dermatology.*

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MEDICAL INSPECTION OF SCHOOL CHILDREN.

H. N. MOSES, M. D., Salina, Kansas.

Read before the Kansas Medical Society, May 5, 1910.

During the past few months we have heard and read much on conservation of our natural resources. Owing to our increased wants great depredation is being made upon our timber and coal lands as well as many of the other natural resources. Products to the extent of great values have been ruthlessly wasted and the time has come when the government must step in and protect future generations against a waste in the present one. The general tendency has been to let growing things get along the best they can.

Although our government has so seriously concerned itself with this matter, it is of little value when compared to another waste that seems to be going on unchecked. Little is being done to prevent the increase of crime, degeneracy and the defective class. Can anyone fail to see the importance of the conservation of the human race? Should not statesmen, educators, and all public spirited people unite in a great movement for the conservation of the child.

The subject of medical inspection in the schools is of the utmost importance, not only to the teacher and the physician but to every parent, and to every taxpayer in our state. Education is our greatest wealth and strength. The American people considered as a whole are the best educated in the world. And education is dependent upon that most vital element of a nations

existence, the physical well being of each individual.

Dr. Allen has said, "When a state for its own protection compels the child to go to school it pledges itself not to injure itself by injuring the child." It owes to every child education and the preservation of health."

We have all heard the adage, "a sound mind in a sound body"; is it not better to say a sound mind making and keeping its body sound. Mental development without a good physique is not desirable. One educator has said, "that a nations health depends on the physical condition of its school children." But teachers have been satisfied with the development of the child showing the greatest mentality, with little regard for the defectives.

By defectives I refer to those cases that are inherited, and to those that may be due to environment and to disease. Certain defects go uncared for, either through ignorance of the parents, or perhaps for the want of means to have them treated.

These defects may include such troubles, as defective eyesight, deafness and nose troubles due to adenoids, shallow breathing, decaying teeth, skin troubles, malnutrition, rachitis, epilepsy, chorea, or perhaps some latent disease as tuberculosis or even heart disease. The parent if acquainted with the facts, in most cases would certainly remedy the existing condition, but the trouble is, that the average parent does not know until the child becomes aware of the condition himself.

Since 1883 several of the European countries have given some attention to the healthful surroundings of their schools. The first medical inspection in the modern sense of the word was inaugurated at Brussels in 1874. Since that date other countries have taken up the work some on a more extensive scale than others, and the movement has extended to the western hemisphere and even to Japan, where it is applied even to the rural communities and has been in operation since 1898.

In the United States, Boston has the credit of being the first to institute medical inspection; this was in 1894 when the inspection was carried on only for contagious diseases. In 1895, Chicago adopted a system of school inspection and Philadelphia followed in 1898. In 1897 the New York City Board of Health appointed 134 medical inspectors for as many districts to carry on the work in that metropolis.

Medical inspection is recognized by the laws of four states; Connecticut, New Jersey, Vermont and Massachusetts; while a number of states have laws delegating to the State Board of Health the duty of examining the eyesight and hearing of school

children.

At the present time medical inspection is carried on in many cities and towns throughout the United States, principally in towns of at least 25,000 population, and in Massachusetts there are a number of much smaller towns receiving this benefit, the total number being 321.

Who is to carry on this work? Naturally the Board of Health should protect the child from contagious diseases and keep the school houses free from infecting germs. Beyond this there is a problem that does not come within the jurisdiction of the health officer. It is the individual watchful care of the teacher over each pupil that counts so much for the health of the school.

There are other conditions as defects of eyes and ears over which the health department has no supervision and which the teacher cannot diagnose, to say nothing of applying a remedy. They may be caused by the school; at all events they effect the child's work in the school and impair his progress. Is it therefore necessary that someone connected with the school should do all that is possible to remedy these conditions. The situation is a delicate one for it involves the home. The physician is inclined to regard it as an encroachment upon his province, and the parent is likely to think it a meddlesome interference with his personal rights.

The physician and the teacher should co-operate. The physician should be counsellor and advisor to the teachers and the parents, in questions of mental and physical development. The medical inspector should be a part of the system. He should have control of everything to do with the physical health of the pupil. The teacher must look to the conditions that favor hygiene, she must develop the physique by gymnastics and proper breathing as well as correct posture and walking.

Schools are the principal cause of dissemination of contagious diseases throughout the community. A large percentage of school children are afflicted with ill-health and various physical defects. The home is certainly responsible for the greater number of these physiological conditions and it is still a question to what extent they are aggravated by conditions of school life. Nevertheless the school offers the greatest opportunities for recognizing and reporting these defects. This then leads us to the problem of the treatment and care of those found to be defective, for medical inspection in the larger cities has had a marked tendency to decrease the number of cases in the schools.

A large percentage of school children are defective in vision.

Probably $\frac{1}{4}$ to $\frac{1}{8}$, all should receive proper correction by glasses before it is possible for good school work to be carried on. It is estimated that 5% are defective in their hearing to such an extent that it materially hinders their work. Only a small minority of these defects of sight and hearing are found by the teacher or are known by the parent or the children themselves. Therefore school inspection should be systematic and the child cared for.

Whatever system is adopted there must be an understanding as to how far the school authorities may go, and also what rightfully belongs to the medical profession.

Schools must not undertake to accomplish what the home, the hospital, and the medical profession stand ready to do, as they are better prepared to do these things than the school.

The plan known as good school inspection would give what is most desired. The inspection is carried on by an inspecting officer with the co-operation of the teacher; it being their duty to make the preliminary tests of eyesight and hearing of her pupils—which most teachers can do in a very satisfactory way. The more difficult cases are referred to the inspector and if the condition needs the attention of a specialist the parents are notified.

Medical inspection will eliminate many of the old time notions in regard to diseases. Tuberculosis once believed to be inherited will be prevented and cured. Curvature of the spine commonly believed to be due to a fall in childhood will be recognized as a form of tuberculosis of the spinal column. The infectious diseases of childhood, the kind that mothers believe every child should have, will be avoided for it will be generally known that all diseases lessens the bodily resistance. Diphtheria at one time was quinsy, now it is a specific infectious disease to be shunned. Night air so poisonous at one time has now become as pure as that in the light of the sun. The little children with defective vision at one time called the dunce will have their vision corrected by proper glasses and will be as bright as their fellows. The deaf will no longer be the heedless and disobedient as soon as the adenoids are removed so that they can hear.

Medical inspection of schools and school children is carried on most extensively in New York, where 150 medical inspectors, all of whom are graduates of medical courses, are employed at a salary of \$100.00 per month. Morning inspection in all the schools is the rule. Working with these inspectors is a corps of trained nurses at \$75.00 per month, who are also connected with

the Hospital for treatment of infectious diseases of the eyes.

In the New York system, the most complete of all the systems, the medical inspectors make a careful examination of each school child at the beginning of each term. Special attention is called to the throat, nose, eyelids, skin and hair.

The inspector does not touch the child, as the child assists him in the examination by pulling down the eyelids, opening the mouth, showing the hands and separating the hair.

The inspector visits his respective school each morning before 10 o'clock and examines, in a room for the purpose, all children suspected by the teacher of having a contagious disease, all who have been absent from school, all who have been under treatment, and all who have been referred by the school nurse for diagnosis.

Each day the inspector receives from the principal a list of absentees, these children are visited at their homes by the school nurse and, if in her opinion medical aid is necessary and the parents cannot afford the services of a physician, the medical inspector calls. In this way the cause of absence is determined and the illness is looked after.

The school nurse is the most important adjunct to medical inspection. Dr. Harrington of Boston believes that little will be accomplished until nurses are made a regular part of the system of school inspection. The incorporation of the nurse has led more to the endorsement of school inspection among the teachers, educators, parents and children than anything else.

Before the installation of the nurse system it was not uncommon to find a case where some child had been sent with a card announcing some contagious disease, and either through ignorance or failure to understand the import of the card, it was thrown aside, and the child allowed to run the street and associate with other children, spreading the disease thereby.

One duty of the visiting nurse is to administer for the minor ailments while the student is attending school; this will keep down the number of absentees. The nurses administer also to the child who is sent home and receives no care from the parents. Or if the child requires a physician and the parents are unable to employ one, the nurse reports the matter to the medical inspector.

The system of inspection most suited for the small city or town is the one in which the Board of Education and the Board of Health unite in assuming the responsibility and in which the Board of Education may authorize the physicians or the teachers

to make periodic inspections of the students.

The state law of Vermont, Connecticut and Massachusetts is practically as follows: The state Board of Health and the superintendent of education prepare suitable cards, blanks and record books used in testing the sight and hearing of pupils in the schools, and shall furnish them free of expense to every school in the state. The superintendent, principal or teacher in every school during the month of September in every year shall test the sight and hearing of all pupils under his charge and make a record of the same according to instructions furnished, and if any are found defective in vision or hearing, or diseases of the eyes and ears, the parent or guardian shall receive a notice to that effect and be requested that they seek the service of their physician in order that the defect may be remedied.

Fortunately, this is a field that can be well covered by any teacher, for all are competent to make a practical examination of the eyes, ears, nose, and throat of the children. They should not try to make a diagnosis; however, sufficient data will have been obtained to determine whether the child is normal or not. The diagnosis and treatment should be left to the physician.

The examination as carried on by the teacher would be the ascertaining of the following facts.

Is there a history of inflamed lids or eyes?

Is the pupil able to read the letters in the 20 ft. line, of the Snellen test types with each eye?

Does the pupil experience pain or heaviness in the eyes or head after study?

Is there a tendency to cross eyes?

Is there a discharge from either ear?

Does the pupil complain of pain in either ear?

Does the pupil readily hear with each ear the ordinary voice at 20 feet?

Is the pupil subject to cold in the head with nasal and throat discharge?

Is the pupil a mouth breather?

Is the pupil suffering from any abnormality, disease of skin or scalp?

Should any of the above be answered in the affirmative, a card of warning should be sent the parent.

It may seem to some that in having the teacher make these preliminary tests that the school authorities would be adding to the work of the school teacher. The principal reasons why the several states having this law have delegated the teacher to

do this work, are as follows:

There is no additional expense to the school district as the necessary blanks are furnished by the state. The method is prompt and does not disturb the general routine of the school, one or two days being sufficient for the teacher to make the necessary examination in her room. The method is accurate enough to show defects that interfere with the child's school work. In many towns it would be difficult to find a physician who could give his time to inspection work. The child would be less nervous and would be more free to tell his condition to the teacher than to a stranger.

As the necessity for inspection becomes recognized, the teachers will give the subject more consideration. There will be instituted courses of instruction in teachers institutes and normal schools. Local physicians will gladly give talks along these lines.

When the teachers are equipped to make inspections, the parents will be convinced that the tests are only designed to show wherein lie some of the physical defects which lessen the capacity of their children for work.

A law in Kansas making it compulsory to have an annual inspection of school children, as in some of the eastern states, is desirable. A similar law was considered by a late legislature, but failed, because the legislators did not have the proper appreciation of the importance of this subject.

It now becomes the duty of the educator and the physicians of the state to encourage the passing of such a law, in order that certain remedial defects can be corrected and the afflicted children will be the better able to cope with the normal ones in their school work.

CANCER OF THE UTERUS.

O. D. WALKER, M. D., Salina, Kansas.

Read before the Kansas Medical Society, May 5, 1910.

With the possible exception of tuberculosis no subject is engaging more attention at the present time than cancer.

Physicians everywhere are thinking upon this disease, pathologists are striving in the laboratory and with the microscope to find out the real cause of cancer and surgeons are trying to perfect their technique so as to eradicate every vestige of disease tissue.

That cancer is on the increase there seems little room for doubt, just how much is difficult to ascertain. The claim is made by some that it is four times as frequent as fifty years ago and then again others contend the apparent large increase is due largely to improved methods of diagnosis, more careful statistics and the fact that country people now seek the city hospital where surgical help may be obtained. Many different conclusions have grown out of this alleged increase.

By many it points to a microbic origin. Others again think the prevalence to be due to the modern habits of life, while Bryant affirms that the increased longevity adds many lives to the cancer limit age and this largely accounts for the relative increase.

The cause of cancer is still an elusive mystery and the scope and purpose of this paper will not permit of the discussion of the various theories of cancer etiology.

Whatever the producing cause may be, microbic, biological or otherwise, carcinoma begins as an epithelial growth. The deeper tissues become infiltrated with this epithelial increase. When ulceration takes place there is rapid proliferation of tissue. As a general statement carcinoma wherever found is laid upon a point of previous irritation.

Before the histological basis of cancer was discovered, pathologists looked upon this malady as of constitutional origin, a virus floating in the blood, and what we saw was but the local manifestation of the disease. Today we know that primary cancer is a local affection and that independent growths in distant organs are but metastases of the primary focus.

Of all organs the uterus is the most common seat of cancer, nearly or quite one third of all cancers are found in this organ.

Cullen in his excellent work includes all cancerous growths of the uterus under one of four groups.

1. Squamous-cell, carcinoma of the cervix.
2. Adeno-carcinoma, of the cervix.
3. Adeno-carcinoma of the body.
4. Squamous-cell, carcinoma of the body (rare.)

Of the prevalence of each variety Cullen states that of one hundred and eighty-two cases of cancer of the uterus—128 were of the squamous-cell of the cervix, 19 adeno carcinoma of cervix and 35 adeno-carcinoma of the body.

Because of the prevalence of the squamous-cell type of the cervix and on account of the ease with which this part may be examined both macroscopically and tissue secured for microscopic examination I will direct your attention primarily to this form

of cancer.

The age of the patient demands careful consideration, the maximum incidence is found between forty and fifty but it may occur as early as the 25th year. The disease is therefore most common about the menopause. This form of cancer is found very rarely in women who have not borne children. Cullen states that of fifty cases in which accurate data could be secured that all were married and that forty-nine had borne children.

The clinical picture of this form is rather indefinite. There is no pathognomonic sign or symptom of cancer. There is first a hardened indurated condition of the cervix without loss of tissue. If examined at this time with the finger, the cervix will feel irregular in outline, the tissues are apt to be friable and bleed readily. If a speculum is used the appearance of the neck is paler than normal. There is a glazed look and if caught with a tenaculum the instrument may tear through. The next stage there is a moderate amount of tissue disintegration, a few finger like processes may be seen or curetted from the neck canal, bleeding will follow the most careful digital examination. The patient at this time complains of discharges, sometimes blood, then again thin and watery. The irregular flow may suggest to the woman the menopause or if this has been established then a temporary return of menstrual flow.

The hemorrhage continues to be more frequent and larger in amount, there is perhaps a fetid odor to the discharge, the woman begins to show some paleness in the face and the mucous membrane an anemic look.

As the disease advances the entire cervix becomes involved, it may appear ragged and ulcerated or a cauliflower growth fills the vaginal vault. The patient's strength begins to wane, she takes on that cachetic appearance so characteristic of malignant diseases. The bowels are generally constipated, defecation is painful, the distended rectum pressing upon the cancerous growth. Hemorrhage is more frequent and at times alarming. The discharge has a peculiar foul odor which can scarcely be mistaken for anything else. Pains through the abdomen are frequent, often of a sharp knife like character; the bladder may now become involved, blood appearing in the urine as the first indication that the growth has extended to this viscus and recto and vesico vaginal fistulas may appear with the urine and feces passing per vaginam.

At this time I can conceive of no condition more deplorable. The patient suffers much. The discharges are very offensive,

the woman is weak and helpless and death comes as a welcomed visitor. The hope for these women is that of an early diagnosis. This may be brought about in two ways, first by informing women of the early symptoms of carcinoma; second, by impressing upon the family doctor the necessity for eternal vigilance and the methods used for early diagnosis.

Women should be taught that any departure from normal menstruation is a matter which calls for immediate attention by the doctor, especially if this should happen about the menopause. I believe there is need for a broad education on the subject of cancer much as is now being pursued in tuberculosis; but first I believe there needs to be an awakening on the part of the profession. As the matter stands I think the procrastinating policy of so many women will be found to be due to a large extent at least to a like course pursued by many of the profession.

The established fact that more than sixty-five per cent of cases of cancer are turned away from our hospitals as inoperable and of those presumably operable only a small proportion are cured is certainly a reflection upon our ability to make an early diagnosis. For whatever we may say laying the blame upon the lethargy of the women, the past history of medicine will prove that medical knowledge of one generation becomes a lay possession of the next.

We are apt to put too much blame of physical disorders in women past forty years as ills of the menopause and assume that nature will take care of this irregularity. I would not be an alarmist but whatever harm an overzealous profession may do, so far as cancer of the uterus is concerned, there is little chance of complaint along this line. How often is a story on this wise heard by the surgeon. "I spoke to my family doctor about this trouble several months ago and he assured me that it was a trivial matter, gave me some medicine and sent me home, and it was not until the matter became very troublesome that he suggested an internal examination, when he found the condition as you see it, and advised me to see a specialist." It is at the door of the general practitioner that lies the responsibility of making an early diagnosis and then I would urge that we cease especially in early cases all applications of caustic or the pursuit of any form of palliative or temporizing treatment as a cure and advise radical measures; and if not prepared to do a thorough operation then send the patient to a specialist."

It is the family physician who first sees these cases and it is necessary that he should become imbued with the importance of

a thorough examination and in early cases make a frank statement to the patient stating his fears and the course to be followed.

I have said nothing regarding the use of the microscope, certainly in all suspicious cases a scraping or better a small section of the growth should be sent to the pathologist. In the squamous-cell cervical growths the diagnosis can be made quite certain macroscopically, so in these cases the microscope becomes an added means; but in those border line cases the microscopic confirmation of suspicious pathological appearances will become very important.

It is a dangerous fallacy that the diagnosis of cancer in the early stages of its growth can be made without the aid of the microscope. In the adeno-carcinoma of the body the microscope is absolutely essential. This point has been demonstrated beyond all cavil of doubt, that all treatment save surgery has resulted in miserable failure.

With the ancients the golden age was in the past, with us it is in the future, some day, perhaps with a clear vision into the secret of its cause, cancer may, as have other diseases, bow to the dictates of preventive medicine, such a day would indeed be utopian. For the present with no means of knowing how to prevent it, we must busy ourselves with causing the entire removal of the offending growth knowing full well that if the smallest particle of cancer tissue is left it will go on reproducing itself and finally the patient's life is sacrificed.

To these two propositions I believe we will generally agree: 1. that cancer of the uterus in its beginning is a limited local disease and may be removed. 2. Every cancer which is not removed kills its bearer sooner or later.

The hope then for these patients is that the cancer may be discovered while it is limited and local and then cure your patient by complete removal.

All treatment other than surgical has resulted in failure. True surgery cannot as yet boast of very flattering results in uterine cancer, but at present, it is the only means which holds out any hope whatsoever.

I do not feel competent to discuss the plan to be pursued in a radical operation. Of one thing I am sure nothing short of a hysterectomy should even be thought of. Whether or not the extensive dissections of Ries and others will in their ultimate results justify the increased immediate mortality seems at least doubtful. At present the pendulum seems to be swinging away from the extensive removal of vessels and lymphatics and toward

a middle ground of wide excision of locally involved tissue including the upper part of the vagina and adjacent parametrium.

Where a case is plainly inoperable it is best where possible to keep the patient in ignorance of her true condition. Hope is thereby retained which to any patient is a blessing.

Much relief in these cases may be had by thorough curettment and the generous use of the cautery. This plan of palliative treatment will bring great relief to the patient. Hemorrhage is often checked, the septic conditions are very much improved. The patient for a time takes on a new lease of life, results which are always worth the best efforts of the surgeon, even though we know that the improvement is only temporary.

My only object in writing this paper is to make a plea for the early diagnosis of cancer. I believe we have reached the limit to further progress in the matter of radical operations. We must direct our energies in the future toward educating the women and ourselves to the point of considering any deviation from the normal menstrual function in women of cancer age as a matter which demands prompt examination and treatment.

The statement was made in the early part of this paper that as a general thing carcinoma was laid upon a previous irritation. Many women are suffering from mal-position of the uterus and especially cervical tears. All lacerations of the cervix should be promptly repaired. The cervix is the most common site and the irritation caused from tender cicatrices probably the most fruitful cause of cancer.

As previously stated the general practitioner is the man to diffuse medical knowledge among the lay public. It is therefore highly important the family doctor should thoroughly appreciate the advantages of an early diagnosis in cancer. With this idea rooted and grounded it will not be long until it will become common knowledge of an intelligent contemporary public. That we might have some clear statements on this subject which could be put before the public in a readable, understandable way, I hope that our state medical society may see fit to publish such literature and through our county medical organizations distribute broadcast, and thus start and carry forward a plan of broad popular education similar to the present successful tuberculosis movement. With an earnest profession and an aroused public mind may we not hope for progress and ultimate results in cancer of the uterus to at least equal the present status of cancer of the breast.

THE DIAGNOSIS OF DISEASES OF THE NERVOUS SYSTEM.

O. S. HUBBARD, M. D., Parsons, Kansas.

Read before the South-east Kansas Medical Society, April 10, 1910.

It is said that more people die each year from diseases of the nervous system than from any other class of diseases, this would indicate that these maladies are very common and that every physician encounters them frequently.

The government report for 1903 shows that there were 328 hospitals in the United States at that time, caring for 150,000 insane, it is estimated that there are 100,000 distinctly feeble-minded persons in this country, and 150,000 epileptics, most of them not in institutions.

Kansas in 1908 had 3400 persons in institutions for the insane, epileptic, and feeble minded, a ratio of about one to five-hundred-twenty of the general population which is a remarkably low rate when compared with some states and largely influenced by our rural surroundings, general prosperity, and moderate use of alcohol. Nervous diseases, without mental alienation, are even more common. In a recent medical journal I counted the advertisements of 47 private institutions for the treatment of nervous and mental diseases.

I have gone over this ground to bring clearly before you the frequency of these diseases and the importance of a better knowledge of them. At the state hospital for epileptics a considerable number of cases of major hysteria, brain tumor, and general paresis have been sent in diagnosed as epilepsy.

Many good men in general medicine have a very inadequate understanding of the nervous system, admit this freely and confess that their knowledge of nervous disease is very limited.

To some extent the position is logical as the finer anatomy of the nervous system is extremely complex and is imperfectly understood even by those who have given a lifetime to its study.

In former years a wholly inadequate amount of time was given to this work in our best medical schools, and today the situation is not all that it should be, further than this, accurate and readable books have been hard to find.

However, in this connection, permit me to say that a working knowledge of nervous anatomy is absolutely essential to a proper conception of these very important diseases and can be acquired by a little systematic application.

The first essential in nervous anatomy is a clear conception

of the neurone. It is the unit and on it hangs the whole system of nervous anatomy, just as individual men united for a definite purpose make up the complex organizations of a great nation. A neurone may be defined as a nerve cell with its processes. The neurone usually has several much-branched processes called dendrites which conduct impulses to the cell and a longer single process, called the axis cylinder, with few branches leading from the cell. This type is variously modified but in essentials there are few differences; some neurones are very minute, others like the motor neurones which extend from the brain to the cord attain a length of several inches or feet.

In diagnosing mental or nervous diseases a carefully worked out history is of even greater importance than in general medicine; the following points should be among those considered; heredity, age sex, race, occupation and manner of life.

Heredity is very important, the nervous system contains the most highly organized tissue in the body and its deficiencies manifest themselves in the off-spring even more frequently and surely than do lesions elsewhere. Heredity is sometimes hard to bring out as people are often ashamed to admit any nervous taint in themselves or their ancestry though in questioning parents it is not unusual to be told confidentially by one parent that while their side of the house is normal the other side is not above suspicion.

As a concrete instance of family taint, there are at present in the state hospital for epileptics, three pairs of brothers, two pairs of sisters, one woman whose mother died recently in the hospital, and one man whose father died there some years ago, one man whose sister, a voluntary patient, left the institution to marry, contrary to the law and propagate more epileptics, and one man whose brother died there some time since. A study of family histories and personal observation lead me to believe that none of us realize the tremendous importance of heredity. Alcoholism, consanguinity, etc., should be considered in this connection and also the fact that nervous weakness may appear in a different form in the child, and that constitutional disease or debility of the parent may appear as some nervous weakness in the child.

By way of digression much might be said about the constantly increasing number of the defective and unfit who are becoming so great a burden upon the state, but so far nothing of much benefit has been put forth in a practical way to prevent the procreation of the unfit. Kansas has a marriage law which is viola-

ted with impunity.

Age may offer valuable points as some diseases, such as epilepsy, anterior poliomyelitis, and spinal meningitis, usually occur before maturity; others as dementia precox at puberty, melancholia frequently at the menopause, while others are characteristic of physical decline.

Sex is sometimes a factor, many more men having general paresis while women are prone to multiple neuritis.

Occupation often influences nervous conditions; actors, speculators, men about town, who live a life of excitement and dissipation and are especially liable to contract syphilis, furnish a preponderance of general paretics and tabetics. Those given to handling alcohol as bar-tenders, etc., have much neuritis. Idle people are much given to hysteria and neurasthenia.

Race is a factor deserving some consideration. The Negro, though his race is full of syphilis, has little paresis and tabes; the German often suffers from melancholia and furnishes a goodly portion of those with suicidal proclivities; the Latin is excitable and is given to maniacal states.

The manner of life should be looked into. The strenuous life may lead to hard arteries and the sudden break which we call apoplexy, the idle life to neurasthenia and hypochondriasis.

Soldiers in the Phillipines, who were homesick, and farmer's wives, owing to their isolation, have often developed morbid views of life. Excitement, worry, abuse of alcohol, excessive labor or idleness, all have a bearing on the nervous welfare.

The complaint of the patient while sometimes not very helpful in diagnosis may give a hint to start us on the right road.

Pain in the abdomen may mean appendicitis or it may be the gastric crisis of tabes, many a lightening pain in the leg has been called rheumatism and treated as such. Tingling in the extremities is often charged to over-eating and sluggish habits but it is often a fore runner of apoplexy or thrombosis. Head-ache may be due to eye strain or a bad stomach but it often means cerebral syphilis or brain tumor

Especially should we be attentive to difficulty in walking, lack of muscular control, peculiar sensations, tingling, etc., loss of control of the bladder, failing eye-sight, and feelings of depression or of unusual well-being.

Having secured as complete a history as possible, a thorough and systematic examination of the whole body is desirable. Poor development, malformations, or any of the common stigmata of degeneracy such as deformed ears and high narrow palate are

suggestive.

Paralysis should always excite attention though when it is slight it is often overlooked, many patients, especially epileptics, have had a slight paralysis in infancy, which at maturity is detected with difficulty.

Practically all cases of paralysis can be grouped into two types, though certain cases partake of the nature of both. The first type will have an incomplete paralysis but all the muscles of a limb will be involved in about the same degree. The limb will be somewhat stiff and the joints move with some difficulty; there will be no atrophy of the muscles except as it comes from disuse. The reflexes are exaggerated and there are no electrical changes.

The second type presents quite a different picture, the paralysis is severe with a tendency towards improvement, frequently only part of the muscles of a limb are involved. The muscles in this type are flaccid and the joints relaxed in contrast to the stiff muscles and firm joints of the other variety.

A pronounced early atrophy occurs, and the reflexes, instead of being exaggerated are lost. The reaction of degeneration occurs.

These facts are not easily kept in mind but if we consider them in connection with the anatomy and physiology of the motor mechanism it is less difficult to remember them. The motor control of the trunk is governed by two neurones; one with its nerve cell in the motor cortex of the brain and its axis cylinder extending down to arborize around a cell in the anterior horn of the spinal cord, and connected with this a second neurone whose cell is in the anterior horn and whose axis cylinder reaches out to the muscle fibre.

The upper neurone has two essential functions, the transmission of impulses from the brain cells leading to voluntary action and a so-called "inhibitory" or controlling action over the lower neurone.

The lower neurone also has two essential functions, the control of actual muscular movements and a trophic function, that is to say, its health is necessary for the health of the part to which its axis cylinder extends. If the lower neurone is destroyed the trophic function is gone and the muscle wastes; the cell essential to reflex action is gone hence there is no reflex. Paralysis is present because the cell governing muscular action is gone.

On the other hand if the upper motor neurone is destroyed anywhere from the brain to its ending in the motor cell of the

cord, voluntary motion is lost because the tract for the transmission of impulses from the brain cell to the cord cell is gone.

Its inhibitory action on the lower neurone is removed, consequently in place of the normal muscular tonus we have an undue stiffness of the muscles and joints and in place of the normal reflex an exaggerated one.

On the other hand true muscular nutrition suffers but little as the cell governing it is not involved.

Cerebral palsy is typical of upper neurone involvement, the paralysis of anterior poliomyelitis and multiple neuritis of lower neurone involvement. Hysterical paralysis may present a confusing picture but the other stigmata of hysteria usually makes its recognition possible.

The smaller paralytic lesions such as eye and facial palsies are chiefly of importance in localizing brain lesions.

Great modifications of the sensory sphere are not unusual in nervous disease. We may have analgesia, anesthesia, pares-
thesia, hyperesthesia, and perversions of muscle and joint sense. In all sensory derangements it is important to rule out functional disease or hysteria. In hysteria the anesthesia is usually one sided or limited to an area not co-inciding with any nerve distribution.

The neurone system for the transmission of sensory impulses is quite complex when compared with the simple motor neurone system.

In considering the transmission of sensory impulses we should remember that while all sensory impulses from the trunk enter the cord together, the fibres which convey muscle and joint sense or a knowledge of the position of our members, follow quite a different path within the cord than do the fibres conveying pain, temperature and touch sensations, hence from a cord lesion we may have loss of muscle and joint sense with no loss of pain sense, or pain may go while touch remains.

In general it may be said that a destructive lesion causes analgesia and anesthesia while an irritative lesion causes paresthesia and hyperesthesia.

The fibres of the tracts of Gall and Burdach, conveying muscle and joint sense principally, ascend on the same side of the cord as that on which they enter. The fibres which go to Clark's column connect there with the cells of neurones which make the direct cerebellar tract and have to do with equilibration. The fibres conveying pain and temperature and most of those of touch arborize about the cell of a second neurone the axis cylinder of

which crosses to the opposite side of the cord and ascends in Gowers' tract.

The gait of a person suffering from nervous disease is often suggestive. In paralysis of the first type, previously described, we have the so-called spastic gait, the muscles have a hypertonus, the joints are stiff and the limbs are moved with some difficulty. The feet are not lifted far from the floor and there is a tendency to knock-knees. Ankle clonus is sometimes present, when marked it may shake the whole body and render walking very difficult. Lateral sclerosis shows this condition in the most marked degree but any lesion which involves the upper motor neurone will cause the spastic gait though it may not be very apparent in minor lesions.

The gait with lesions of the lower motor neurone is essentially one of weakness, it is sometimes spoken of as the paralytic gait though this is a misleading name. The muscles are weak and flaccid and the joints loose and relaxed. The ankles show a tendency to turn and the knees to be over extended; the feeble muscles make it difficult to lift the foot, hence it is often dragged along the floor. In this form we see the so-called flail motion, the whole limb with its loose muscles is thrown forward often by a swing of the trunk and the foot flops down without much muscular control.

In multiple neuritis, especially that due to alcohol, the step-gait is often seen, this is due to a paralysis of the anterior tibial group of muscles causing foot drop, in walking the patient raises the knee very high in order that the toe may clear the ground, the foot then comes down with considerable force.

A third division is the ataxic or stamping gait, which is seen in locomotor ataxia or tabes. This is due to a lesion of the sensory system and is not primarily a motor involvement. The lower sensory neurone is involved, especially that part which makes up the posterior columns of Gall and Burdach, which have to do with muscle and joint sense or a knowledge of the position of our members in space. The sense of touch and pain are also perverted. The victim of this lesion does not know just where his feet are without looking at them. Naturally, he often steps too high or takes too long steps, keeps his feet wide apart and stamps them down with some force as his muscular power is usually good.

In short the ataxic gait is due to loss of muscular control due to sensory nerve involvement and not to weakness of the muscles though weakness may be a complication late in the disease.

The trotting gait of paralysis agitans and the cerebellar stag-

ger, when typical, are characteristic but are seldom seen.

The various reflexes are often a valuable source of information in nervous diseases. Someone has defined a reflex movement as "one that results from the conversion or, reflection of a sensory stimulus into a motor excitation." Reflexes have been classified as skin, superficial, deep, tendon, etc., but there is no special benefit from such a classification as they are all similar in essential details. Most reflexes can be inhibited in some degree and re-enforcement by diverting the patients attention from the test is often necessary.

Perhaps the most important reflex and certainly the one most oftentested is the pateller reflex or knee jerk. The manner of testing for it is well known, the anatomy and physiology upon which it depends may be more obscure.

Briefly, a sensory impulse caused by striking the patellar tendon travels over a sensory neurone the axis cylinder of which arborizes about a motor cell in the anterior horn of the cord. The motor neurone of which this cell is the center is stimulated by the impulse and a muscular movement results. This motor cell has, like all the lower motor neurones, an upper and inhibiting neurone connected with it, if this upper neurone is injured or destroyed the reflex is exaggerated as the inhibiting force is removed and excessive movement results. If on the other hand, the reflex arc is interrupted anywhere in the two neurones which make it up a loss of reflex occurs.

The knee jerk is increased in a number of conditions in which the upper motor neurone is involved such as hemiplegia, transverse myelitis, lateral sclerosis, etc., it is also increased in diseases irritating the sensory neurone which brings the impulse to the cord. The reflex disappears in any condition like multiple neuritis or tabes where the reflex arc is interrupted. For some reason which is unexplained and contrary to what we might expect, when the cord is completely severed the reflex disappears.

Eye symptoms are common in nervous diseases and of decided importance in diagnosis. The sudden occurrence of strabismus with or without ptosis is always suggestive of some serious pathological condition, usually a syphilitic lesion or a new growth.

Remembering that the fourth nerve supplies the superior oblique and the sixth the external rectus may help us to localize the lesion.

The third nerve supplies all the other eye muscles, governs contractions of the pupil and elevation of the eyelid. The sympathetic nervous system furnishes the mechanism through which

the pupil is dilated.

The pupillary reflex obtained by exposure to a bright light or the sudden change from a long focus to a short one is quite important but is somewhat uncertain in its manifestations. Usually in tabes and sometimes in general paresis we have the Argyle-Robertson pupil, that is the pupil responds to accommodation but is quite insensitive to light. Rigid or unequal pupils are common in general paresis.

Irritation of the medulla usually dilates the pupil, it is often mildly dilated in hysteria, neurasthenia, epilepsy, anemia, etc., always in epilepsy during the occurrence of the seizure.

A failure in vision is often a comparatively early symptom of nervous disease and may be due to several causes. Hysteria when it affects the vision usually manifests itself as a concentric contracture of the visual field, though occasionally a complete loss of vision occurs suddenly from this cause. Blindness due to poisoning such as tobacco amblyopia is rarely met with.

Blindness or rapid failure of vision should call for an ophthalmoscopic examination which may reveal an optic neuritis or atrophy. Optic atrophy frequently occurs in tabes and when it appears early the ataxic symptoms are said to be less pronounced.

Optic neuritis is one of the most common symptoms of intracranial pressure and when accompanied by persistent vomiting and headache makes the diagnosis of pressure of some kind practically certain. Homonymous hemianopsia or blindness of the same side of both visual fields indicates a lesion behind the chiasm and on the same side of the brain, this with other symptoms has considerable localizing value.

Disorders of the bladder and rectum, abnormalities of the speech and hand-writing, and perversions of the special senses are all matters of importance but a paper already too long cannot deal with them.

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SUB-MUCOUS FIBROID, THE DIAGNOSIS AND TREATMENT, WITH A REPORT OF SOME CASES.

ALBERT SMITH, M. D., Parsons, Kansas.

Read before the Kansas Medical Society, May 5, 1910.

The subject of fibroid tumors of the uterus having already been exhausted, but of this particular variety namely sub-mucous fibroid, which gives so much trouble with regard to the diagnosis, it will perhaps be pardonable to write.

The differential diagnosis between a sub-mucous fibroid, a recent miscarriage, the menopause and carcinoma of cervix or uterus are often misleading.

The characteristic symptoms of a sub-mucous fibroid are hemorrhage and pain, although the pain may be absent. The hemorrhages are often excessive and may be worse at the menstrual period, but may last for weeks and months. When pain is present it is usually of an expulsive nature, as if the uterus were trying to push the foreign body without the cervix, they are severe, intermittant, and expulsive in character, like those of labor and may be mistaken for an abortion with retained placenta.

A thin serous oozing from the mucous surface, as in the early cases of cancer, may be the first symptoms to call the woman's attention to her condition.

In the beginning most fibroids are interstitial and only become sub-mucous as they grow.

The myomatous tumor takes its origin in a little muscular whorl which is poorly vascularized as the tumor increases in size, the vessels are thickly crowded around its periphery, and as it becomes sub-mucous it pushes down toward the uterine cavity and begins to infringe upon the mucosa.

The latter is crowded upon the opposite wall and thins out until it loses its normal characteristics and the vessels are exposed then hemorrhages occur. In many cases where a total extirpation of uterus has been done for multiple fibroid, all the severe symptoms septic, and hemorrhages have really been due to a small sub-mucous tumor projecting into the uterine cavity, sloughing and causing the hemorrhage and septic condition.

If this small sub-mucous tumor had been removed by curettement or other means, no hysterectomy would have been necessary.

The injection of the blood vessels of fibroid or myomata of the uterus clearly explains why sloughing and necrosis of the sub-mucous tumor occur, for their internal blood supply is almost always poor.

The diagnosis is made from the history of excessive flow, and intense menstrual pain and by direct examination as by dilation of cervix and passing finger or sound around it on all sides, the tumor is usually smooth and attached by a pedicle within the uterus.

A differential diagnosis between a large fibroid and an inverted uterus is sometimes very difficult, this can only be done by careful palpation of the peritoneal surface of the uterus by abdomen and rectum bimanually, when if there is any inversion,

the corresponding depression of the peritoneal surface will be felt.

A mistake may be made in diagnosis between a sub-mucous fibroid and a cancer of the cervix or body of the uterus, especially when the patient has frequent hemorrhages, and acquires a cachectic look, and when there is sloughing of the fibroid with frequent discharges.

The fibroid is more dense and cancer more friable and with a broad attachment.

A microscopical examination of a specimen should clear up all doubt as to a cancer of the uterus.

The treatment of a sub-mucous fibroid is by extirpation, the method will vary according to whether or not it has a pedicle and according to the size and sight of the tumor, either by the vaginal or by the abdominal route.

Case No. 1.—During the early evening of March 18, 1908, the writer was called to a neighboring town to see a woman who was 44 years of age mother of 8 children, all normal labors. Four weeks prior to my visit she had given birth to a full term child. Her labor was so rapid, she gave birth to the child before a doctor arrived, she also expelled the placenta and proceeded to have a severe hemorrhage immediately after the delivery of the child and placenta.

The doctor upon his arrival gave her ergot and apparently stopped the hemorrhage, she however had hemorrhages at intervals up to the time the writer was called, which was just four weeks after her confinement.

At this examination she was almost exsanguinated, pulse weak and rapid, temperature 104. She had all the appearances of extreme sepsis. She was so weak she could not talk above a whisper. Upon examination of the patient we found a large sloughing sub-mucous fibroid attached to the anterior fundus of the uterus. The uterus was inverted and at first it was certainly a puzzle to tell just what we had.

This tumor had almost filled the vagina and it was very difficult work to get above the tumor to make out the inverted uterus. The patient was so reduced in flesh and had lost so much blood and was in such a septic condition, that we thought a hysterectomy was out of the question at that time.

The only way we could remove the tumor was by passing a large wire around the pedicle. The pedicle had such a wide attachment that we were afraid to remove it at the same sitting so we tightened the wire with the ecrasure, and removed the

tumor the next day, the next step was to try and reduce the inverted uterus which we finally succeeded in doing. Owing to the cervix being largely dilated which was due to the tumor having such a large pedicle.

By the use of the bichloride douche daily and supportive treatment the patient finally made a good recovery, and is in perfect health today, and at this writing is six months pregnant.

Case No. 2.—Woman, age 35, mother of three children. In this case there existed a multiple variety of tumors, there were the sub-peritoneal a large interstitial and a large sub-mucous fibroid. The uterus and tumors combined weighed about 10 pounds. It was necessary to do an abdominal hysterectomy to deliver the tumors and uterus.

As usual the large sub-mucous tumor which was about as large as a cocoanut, was causing all the trouble, and this woman had suffered pain for years and had repeated hemorrhages, but no septic condition. She made a good recovery after the operation.

Case No. 3.—January 1, 1910, the writer was called in consultation to see a woman, age 49 years, mother of one child. Patient complained of pain and tenderness in right iliac region, pulse 80, temperature normal, this woman was very nervous, and had a marked cachectic look, upon examination found a large mass in the right side of pelvis, patient had several floodings spells, she was at that time passing considerable shreds and blood, which had a very disagreeable odor, this mass appeared to be in the right side of the fundus of the uterus. The uterus was large and hard, cervix was hard and nodular. One week later this mass in the right side had disappeared, but the patient still had a foul bloody discharge and was very nervous and had a cachectic look. On January 9, the patient went to Kansas City to consult a well known surgeon who diagnosed the case as cancer of the uterus. About January 15, the patient stopped flowing, she then went to St. Louis, and consulted a prominent gynecologist who pronounced her case, free from cancer but suspicious and advised a hysterectomy. The patient was at my office recently for an examination, the mass could not be detected, but the uterus was rather large and hard, she now menstruates regularly, and is gaining in flesh, and feeling much stronger. While in St. Louis she had a curettement, and a microscopical examination made of the scrapings, which revealed no sign of cancer. We now believe this mass was a sloughing sub-mucous fibroid of the uterus.

Truesdale summarizes the sub-mucous fibroid as follows:

"The sub-mucous fibroid, clinically, may be considered a

malignant growth, it commonly occurs with one or both of the sub-mural or sub-serous types and is easily diagnosticated. It occurs alone with relative infrequency and is usually not discovered until late. Hemorrhage at the menstrual periods and between the periods frequently with dysmenorrhea, characterizes its presence. When it is large and sessile, hysterectomy is the operation of safety. In certain cases the choice of the operation may be left to the patient. The comparative risks of the operations and the possibility of malignant degeneration of the tumor should be clearly presented to the patient."

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MEDICAL JURISPRUDENCE.

HON. W. H. CLARK, City Attorney, Hoxie, Kansas.

Read before the Sheridan County Medical Society.

Walk with me down to the sea-shore and pick up a pebble, you notice that it is fashioned after a law of nature, for it is in the exact form that best resists pressure, and is worn as smooth as glass. It is so perfect in its present state of formation, that you take it as a keep-sake, because its beauty appeals to your sense of admiration. But could you know its history, from the time when a rough fragment of rock it fell from an overhanging cliff into the sea, there to be taken possession of by the strong under-currents, and dragged from one ocean to another, perhaps around the world, for hundred and hundreds of years, until in reduced and perfect form it was cast upon the beach, as you find it, you would then have a fit illustration of what principles now in familiar use, have endured, thus tried, tortured and fashioned during the past ages.. We stand by the great rivers and admire with pleasure the great body of water flowing so sweetly and so placidly on, but could you trace it back to its source, you would find a sparkling little spring under the shadows of the great forest trees, from thence you would see it like a silvery moon-beam, floating ever and on and on, fed here and there by other streams and by secret springs and blessed with the dews of heaven, it gathers volume and force, plowing its way through the gorges of the mountains, it widens and deepens its channel through the states, until it attains its present majesty. Thus it is that our truest systems of science born in the dark untraceable ages of the past, had small beginnings, gradual and countless contributions until today, they stand like great monuments of perpetual benefit to all mankind.

Take the history of medicine properly called physics and we find that it has been described as a science of unbounded extent and as reaching from an atom to God himself. It is made to embrace the entire doctrine of the bodies and existences of the Universe, their phenomena, causes and effects. Lockwood would include God, angels, and spirits under this term. The origin of physics or medicine, is referred to the brahamns, magi, and Hebrew and English priests. From these it was passed down to the Greek sages, particularly Thales, who first professed the study of nature in Greece about 595 B. C. Phythagoras endeavored to explain the philosophy of disease and the action of medicine about 529 B. C. From him together with Plato and the Peripatetic Schools, it decended into Italy and the rest of Europe. We know that medicine was practiced from the earliest history up to the time of Christ, the greatest physician the world has ever known. We are told "he rose out of the synagogue, and entered into Simon's house. And Simon's wife's mother was taken with a great fever and they besought him for her. And immediately she arose and ministered unto them," and that "when the sun was setting, all they that had any sick with divers diseases brought them unto him; and he laid his hands on every one of them, and healed them." Thus we trace the history of medicine from its earliest incipieny down through the ages, until we find it today in all of its beauty, perfectness and beneficence.

What has been true of medicne has likewise been true with the origin and history of the law, for ever since there has been the science of medicine, there has been hovering over and around it an endless circle of just, equitable and merciful law, to insure the faithful practice, performance and conscientious observance of the great principles of medicine, by the true, honest, faithful and conscientious practitioners of medicine, the grandest, noblest and best science known to man.

Ever since there has been a people, there has been a law to govern them, in all their acts and deeds, in fact we trace the origin of law back to the time when tis' said "that in the the beginning God created the Heavens and the earth,,' and the earth was without form and void and darkness prevailed upon the face of the deep and the Spirit of God moved upon the face of the waters and God said let there be light," from that time on down to the present day there has been a law to govern mankind in his life on earth and almost from the first there has been the physician, whose hands have touched the eye blind with disease and caused it to see the beauties of the world, whose skilled hand has touched the

cheek that was burning under the scorching heat of the deadly fever, causing the fever to disappear as if by magic, and restoring the patient to life and to health, and who has given his life service to the relief of suffering humanity.

Medical jurisprudence is that science which teaches the application of every branch of medical knowledge, to the purposes of the law; hence its limits are, on the one hand, the requirements of the law, and on the other, the whole range of medicine. Anatomy, physiology, medicine, surgery, chemistry, physics and botany, lend their aid as necessity arises; and in some cases all these branches of science are required to enable a court of law to arrive at a proper conclusion on a contested question, affecting life or property. As a lawyer, I know of no other thing, that is of so great importance to the physician, to the laymen or to the lawyer, as Medical Jurisprudence. It is my purpose in this paper to speak only in a limited way of those things that are of the greatest interest and of the greatest value to the legal and medical professions. I will first consider in a very brief manner, abortion, which under our law is divided into justifiable abortion and criminal abortion. Abortion is justifiable under our law, where it is necessary to save the life of the mother, as in cases of deformity of the pelvis, where a living child could not be delivered. It is criminal where there is no legitimate or proper reason for its performance, and the act is committed either from a wanton desire to destroy the child, or to obliterate all traces of pregnancy.

Infanticide, to my mind one of the most wicked, cruel, criminal and murderous crimes known to man, is the criminal destruction of the new born babe. The moment the child appears in this life and has been wholly produced from the body of its mother, whether it be still attached to its mother by the umbilical cord or not, it is in law entitled to every protection and every care and the hand that can murder the little innocent infant, deserves to meet the penalty of our law. Section 2503 of the General Statutes of Kansas, provides as follows: "Every person who shall administer to any woman pregnant with a quick child any medicine, drug or substance whatever, or shall use or employ any instrument or other means with intent thereby to destroy such child, unless the same shall have been necessary to preserve the life of such mother, or shall have been advised by a physician to be necessary for that purpose, if the death of such child or mother thereof ensue from the means employed, shall be guilty of manslaughter in the second degree."

The medical profession needs no criminals in its midst and the

sooner it frees itself of them the better it will be for the medical world.

While the doctor and the lawyer occupy a dual position, it being oftentimes necessary for each to have the services of the other, yet I opine that it would be better in every instance, if the lawyer had the consultation and advice of the doctor, before disease had weakened and affected his body, and so would it be much better for the doctor to have the consultation and advice of the lawyer, before he is brought into court by some angry patient who imagines he has a case of mal-practice against the doctor, and therefore in a limited way I want to offer in this paper, some law that has been laid down by our Supreme Court and which it will do well for you to abide by.

Section 5915 of our Kansas Statutes provides in its sixth clause, that a physician or surgeon shall be incompetent to testify "concerning any communication made to him by his patient with reference to any physical or supposed physical disease, defect or injury, or the time manner or circumstances under which the ailment was incurred, or concerning any knowledge obtained by a personal examination of any patient, without the consent of the patient". "But if a person without objection on his part testifies concerning any such communication," then physician can then be forced to testify concerning same.

Hence remember that one of the greatest benefits of your profession is in keeping secret all facts learned in the treatment of your patients and all matters intrusted to your confidence by a patient.

There is a case cited in 6 K. and 9 K. that holds that a physician and surgeon is not considered as warranting a cure, unless under a contract for such purpose. But his contract is that he possesses that reasonable degree of learning and skill ordinarily possessed by his profession, that he will use reasonable and ordinary care and diligence in all cases he undertakes, and his best judgment in case of doubt. He must though apply correctly what is settled in his profession. He is not responsible for want of success, unless it is shown to result from failure on the physicians part to use ordinary care and diligence in the treatment of his patient.

There is a case cited in 25 K. that holds that where B called a physician to wait on a patient, without any agreement as to who was to pay for the physician services and the physician went to the home of B where B's father was sick and treated his father and the physician all the time looked to B for his pay, that the

physician can recover from B, without any contract.

No statutory provision as to father paying physician for treating parents, children without contract but common law, makes parent liable for doctors services without contract.

The later decision of the courts in all of the states point this out, that the physician ought to be required to use the kind of treatment accepted as the proper treatment among the profession for the stated case, and that the surgeon must use the kind of instruments accepted as the best instruments to be used by the profession in each stated case. You can no longer use the rusty saw or the dirty knife, so read up on the latest treatments, keep posted and abreast of the times and no person can ever recover from you any damages for mal-practice.

The doctors field is one of boundless extent, in crossing it, he travels through the shadows of the valley of death and in his mature years, after years and years of ceaseless, faithful service, climbs the mountain of his glory and with hair tinged white by the snows of many winters, he sits in the shadow of life's sunset, happy in the knowledge of the great good he has done for suffering humanity.

The elucidation and proper settlement of momentous questions of law falls upon his shoulders. It is his duty to say when an heir has been born alive; to decide when life left the body; to expose feigned diseases; to tell whether it is human blood that has been found where a body has been murdered; to tell whether poison has been administered and what kind of poison; to tell what kind of a blow and with what kind of an instrument will cause death under stated conditions; to tell whether insanity exists and if so if it is idiosyncrasy, imbecility, melancholia, moral mania, monomania, kleptomania, pyromania, dipsomania, homicidal mania, suicidal mania, perperal insanity of dementia.

The all important question to the physician, is the matter of compensation for his services. 'Tis said that the lawyer always secures his fee before rendering any legal service to his client. With the physician the rule has always been different. We find that the courts in England hold that the physician has no remedy at law against his patient for his services, that the employment is wholly honorary. This rule I am glad to say, has never had place in this fair land of ours. Our courts take this view of the matter, that a physician has a right to charge for his services and that his compensation depends upon a contract, either expressed or implied. The service of the physician being valuable, our law implies a contract to pay a reasonable con-

sideration therefor, by any one receiving the benefit of such service. This implied contract is usually with the patient, or where one stands in such relation with the patient as to be liable, for necessities furnished him, as the relation of parent and child, husband and wife, guardian and ward.

But the promise of a third party to pay for medical services rendered another, may be inferred, as in any other case, where the circumstances are strong enough.

The contract may be conditional, as for instance, the physician, may profess to cure a certain disease, within a specified time, in such a case the physician can recover nothing for his medical services unless the patient is cured, of the disease within the time agreed. Where there is no express contract the physician is entitled to a reasonable compensation for his services; and it has been held, that in order to show the value of his services he may show that his professional standing is high. When a physician is employed to attend upon a sick person, his employment continues while the sickness lasts, and the relation of physician and patient continues, unless it is put to an end by the assent of the parties, or is revoked by the express dismissal of the physician. A physician's compensation for his services does not depend at all on the fact of his having effected a cure, for our law holds that he can recover reasonable and usual compensation for his services, if he has used due care and diligence in the treatment of his patient.

There has been a false idea handed down from generation to generation that it is the duty, of the physician to attend the sick when called on, regardless of whether he ever expects to get any compensation or pay for his services, this idea had its birth in Asia Minor and in England, where on the account of the honorary position occupied by the physician, and on the account of the fact that the physician at law could recover no compensation for his services. There has never been a more false and unfounded idea in the minds of the people. There is no law in our state that requires the physician to attend any person, unless he wants to, but it is my opinion that once he visits the patient, his contract to attend the patient, and render medical services, becomes binding upon him, and cannot be broken, save with the consent of the patient, of the father, mother, the guardian or the person liable in law for the physician's services, unless it be distinctly understood, that the physician is to make certain stated and limited visits.

The worst enemy that the ministry ever had is the "Theo-

logaster," the worst enemy that the law ever had is the "Shyster" and the worst enemy that the science of medicine ever had is the "Medicaster" or what is known among us laymen, as the "quack doctor."

The enforcement of the law will rid the profession of the "quack doctor" and thus will encourage its true, big hearted and big brained practitioners to so act and so live, that their profession can point to them with pride, and the great common people, can unhesitatingly confide in the doctor, with a perfect confidence, that he will skillfully and ably treat their afflicted ones. Civilization and education will in a few years bury the "quack doctor" so deep beneath the sea of oblivion, that all of the x-rays, in the land can not find one of them. When that day comes, and it is not far distant, physics, which is today making the greatest bounds, in advancement of any known science, will have reached the perfection of its glory and the physician who has been only partially protected by our laws, will then be encomposed about with an endless chain of just, and merciful laws, giving him liens in law against the property of his patients, for his services rendered, in saving their lives, and then in truth and in deed will all mankind graciously acknowledge them as brothers, then will the world look upon them as they really are, practitioners of the greatest, of the best and of the noblest science known to man, medicine.

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DRUG REFORM.

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Dean School of Pharmacy, University of Kansas, Lawrence, Kansas.

The American Pharmaceutical Association has for the past two years honored the writer by appointing him as Chairman of a Committee which should have for its purpose, among other things, the promotion of proper and uniform administration of the drug end of the Food and Drugs Law. In the various states improvements in intrastate inspection and supervision and administration is needed very much. The State of Kansas deserves the credit of having administration of the highest order but yet there are certain loop holes for the introduction of sub-standard and adulterated material which physicians and pharmacists should unite vigorously in checking. One of these loop holes and one of the most insidious sources of supply of substandard material, and one from which the professions and public should be protected is that which has unfortunately become attached to some of the offices of the dispensing doctor. There are many towns and some cities who receive a large

supply of their drugs from this source, and many of the goods thus dispensed do not pass legal inspection and thus there is an evasion of the law which is unfair to the public and to the professions of Pharmacy and Medicine. This feeling of injustice to the public is shared by the two professions referred to. At a recent meeting of a committee appointed by the Douglas County Medical Society, appointed to consider the problem with the writer, concluded to recommend to the Douglas County Medical Society, that it approve any legislation on Drug Reform—legislation that would have the effect of bringing about more uniform standards of medicinal agents. And to this end this Committee would recommend that the inspectors in the State should be empowered to inspect drugs and medicines wherever they are dispensed. This committee fully agreed with the proposition that if a physician is permitted to dispense or vend remedial agents of one standard this standard being prohibited by the regular pharmacists, it leaves a loop hole for the introduction of inferior drugs. This Committee also believes that a more rigid application of the spirit and letter of the Food and Drugs Law would be helpful to both professions.

It also approved of certain reforms in regard to the itinerant vendors which is referred to in this article.

Cases of evasion such as referred to above have come under my personal observation. To cite but one out of many: I called the attention of a physician in a neighboring town to a fluid extract of Belladonna, of a certain make he had on his shelf. I informed him that we had examined this brand, or make, in the Drug Laboratory and had found it of less than half the official strength. The dispensing physician replied: "I do not care at all for standards; what I am more concerned about is clinical results. That preparation," he said, "answers my purpose." Such cases as the above are repeatedly called to my attention. Inspector Beal, of Ohio, writes as follows:

"Candor compels the admission that some of the poorest drugs found anywhere were discovered in the offices of dispensing physicians, especially of those located in the smaller towns and rural communities. The Ohio Drug Inspectors have found physicians using tablets of codiene with other ingredients costing less than the wholesale price of codiene alone. Elixir of pepsin costing \$1.00 per gallon and alleged syrup of white pine compound billed at 50 cents per gallon. Inspector Beal says: "I have myself met pharmaceutical travelers who regularly carry two grades of elixir of pepsin and other commonly used pharmaceuticals; a cheap grade offered to physicians and a more expensive quality especially de-

signed for druggists' prescriptions."

It is needless to say that any scrupulous physician or pharmacist will advocate any movement toward bettering this condition. The professions of medicine and pharmacy cannot have two standards; one for the pharmacist and another for the physician. They cannot afford to have any such loophole for the introduction of adulterated and misbranded material. We have frequently stated that many physicians for many reasons prefer writing prescriptions to avoid the responsibility of handling drugs as a pharmacist. There are others driven by necessity oftentimes, to dispense drugs themselves. It seems to us that if the latter assume such a responsibility they should have the protection that the Food and Drug Law affords. In this opinion, we are happy to say, we have the endorsement of many members of the medical profession. We feel that whenever medicines are manufactured, offered for sale, or dispensed, inspectors should have access to such places and if misbranded or adulterated material is found, whether it be in the private dispensary of the physician, who is acting as a pharmacist, or whether the articles are conveyed to the individual, whosoever, as between a dispenser and a customer, it should be sent into the laboratory and it should follow the same course as all other misbranded or adulterated material.

A prominent pharmacist in Ohio in discussing this problem of Drug Reform, rather humorously says: "When I can find an article written upon the subject which does not impress me with the idea of two fellows both reaching for the same dollar, I may expect some results." He also says: "An unprotected dollar is the most defenseless thing in Creation, and those who wish to reform the dispensing doctor from mercenary motives (or words to that effect) are destined to have a —time."

I quite agree with the above writer (Mr. J. W. Forbes) and while I think there are some who have at heart a deeply rooted desire for commercial gain, there is no reform which may hope for success along such lines—the public and the professions will not stand for this.

My own experience with the administration of the Food and Drugs Law, my connection with the Revision Committee of the United States Pharmacopoeia and the Committee on Drugs Reform of the American Pharmaceutical Association, leads me to hope that all personal and self-seeking will be eliminated from any efforts toward such reform and that nothing may be done which will not be materially helpful to both professions.

A joint committee consisting of representatives of the Board

of Pharmacy, the Kansas Pharmaceutical Association and some advisory members of the Board of Health, have proposed to change the Pharmacy law and to obtain through this change such a reform as above indicated and also to regulate the practice of the itinerant vender of drugs. It is proposed by this joint committee to amend the present law so that it shall read: Any itinerant vender of any drug, medicine, etc., must be a registered pharmacist and any itinerant vender who shall profess to treat or cure disease, injury or deformity of the human body must be a registered physician and shall pay an appropriate license for such itinerant traffic."

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A CASE OF GANGRENOUS STOMATITIS PROBABLY CAUSED BY THE BACILLUS NECROPHORUS.

FARQUHARD CAMPBELL, M. D., Kansas City, Kansas.

FREDERICK W. SHAW, M. D., Kansas City, Kansas.

In reporting this case of gangrenous stomatitis, we do so because of the rarity of the disease and because of the bacteriological findings.

Case History.—D. R., age 13 years 6 months, seen first on December 15, 1910. The patient was probably in the second week of typhoid fever. The temperature ranged from 103 degrees F. to 105 degrees F. Pulse was about 130, slightly dicrotic. He showed evidences of profound intoxication. The bowel movements were very foul smelling, the tongue covered with a dark brown coat, the mouth dry and some sores on lips and teeth.

He became comatose on December 17, removed to Bethany Hospital on December 18. He showed some evidences of nervous irritation and some subsultus tendinæ. Bowel movements and urine passed involuntary.

The usual treatment was adopted; intestinal antiseptics, cold baths, liquid diet.

The temperature declined rapidly; tympanitis disappeared, fæces became more normal and the heart action improved with occasional doses of strychnia and alcohol.

It was very difficult to administer nourishment and water.

The secretion of urine became scanty and the delirium more pronounced.

The microscopical examination of the urine showed some hyaline and granular casts, and a small amount of pus but probably not any more than might be expected from the severity of

the disease. We put the patient in some hot packs, and being able to give him more water, this condition improved.



About January 3, the face appeared to be puffed on both sides, on the 4th the right cheek was considerably larger, distinctly indurated and pink in color, on the following day the cheek was more swollen, harder, a deeper red and slightly glossy. On the 6th a light brown patch appeared which rapidly became darker and finally black. The characteristic offensive odor of the breath was well marked. Several yellowish spots appeared on the surface, as the black spot had a boggy feeling it was opened and a dark brown fluid with a flocculent precipitate escaped. The gangrenous portion extended rapidly, the patient became more comatose and finally died on January 10, 1911.

The condition started on the inside of the mouth, probably from an abrasion common in typhoid fever or from some irritation of the teeth. When the face started to swell the temperature was elevated for a few days, but toward the end became normal and at times even sub-normal.

Pathology.—Cover-glass preparations were made from the necrotic tissue and together with numerous bacteria some beaded threadlike forms were found. This organism resembled the bacillus necrophorus and suitable* culture media was prepared for its cultivation.

Two pieces of tissue were taken from the inside of the cheek at the junction of the healthy and necrotic tissue. Sections were made from these and stained. The stained preparations showed the beaded thread-like organism, resembling the bacillus necrophorus, in large numbers at the junction of the healthy tissue. Areas of coagulation necrosis were seen.

After removal of the two pieces of tissue for microscopical

*For further bacteriology of *B. necrophorus* see "Necrobacillosis of the Skin," Journal Kansas Medical Society, December, 1910.

examination, yellowish areas of a cheesy character could be seen scattered among the brown tissue. From the surface, inoculation of culture media made up of rabbit bouillon was made. This was grown under anerobic conditions and beside the *B. pyocyaneus* and some other organisms, gas bubbles of the same character as *B. necrophorus* appeared in the lower portion of the tube. On magnification, the colonies were seen to be made up of a yellowish brown center surrounded by a thin wavy border. The peculiar odor of the *B. necrophorus* was present. Glass-cover preparations showed the same beaded bacilli.

No attempt was made to isolate the organism in pure culture and no animal inoculation was made.

From the morphology of the organism obtained in the smear preparations and in the tissues, and the cultural characteristics, we believe that this organism is the *B. necrophorus* and on account of the absence of other pathogenic bacteria, that it was the predominating factor in the causation of this case.

Lingard, quoted in Coplin's Manual of pathology, 3rd edition p. 640 describes a thread-like bacillus found in tissues of noma.

A text book of special pathology—Beattie & Dickson, 1909, p. 230—An anaerobic organism in the form of long threads has been found in the necrosed and necrosing tissues.

It is possible that the two quotations cited above were *B. necrophorus*.

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Elimination of Hexamethylenamine by the Mucous Membrane of the Middle Ear and Nasal Sinuses.—In the Boston Medical and Surgical Journal of June 30, 1910, Barton reaches the following conclusions::

1. Hexamethylenamine is eliminated by the mucous membranes of the middle ear and accessory nasal sinuses.

2. Judging from the limited data at hand, it would appear that the drug is of considerable value in cases of acute suppurating otitis media and sinuses. The chronic forms are apparently benefited.

3. Upon a priori grounds it may be fairly assumed that hexamethylenamine may prove to be a valuable prophylactic in those diseases commonly attended by otitis media; perhaps also a prophylactic to be used prior to surgical operations upon the middle ear, the mastoid, and sinuses of the nose.—Therapeutic Gazette.

THE JOURNAL

OF THE

Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Horie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1909, it incorporated the Wyandotte County Medical Journal, owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

LIST OF OFFICERS.—President, O. P. Davis, Topeka; 1st Vice-President M. F. Jarrett, Ft Scott; 2nd Vice-President, J. T. Axtell, Newton; 3rd Vice-President, G. W. Jones, Lawrence; Secretary, Chas S. Huffman, Columbus; Treasurer, L. H. Munn, Topeka; Librarian, S. G. Stewart, Topeka.

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EDITORIAL

Criticism oft-times stirs a flagging ambition.

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Simplification is or should be the goal of all.

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The louder the argument usually the less the thought.

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Jealousy like hate, is a result of a disordered mind.

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Ones motto should be, not how much can be done, but, how much can be well done.

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Ehrlich's "606" (dioxidiamidoarsenobenzol) is now called salvarsan a name that is more euphonious, less technical and easier to remember.

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The annual dues to your county and state societies are due, and payable. It will facilitate the work of all concerned if you will pay them now.

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With this issue a new department will be established, and that is one for reports of cases. It will be open to all and it is earnestly hoped that every one with an interesting case will write it up for the Journal where it will be received with many thanks.

It is planned to make this department a feature one and it of course requires the co-operation of a large number of the members to make it a success.

It is a pleasure indeed to read in the Journal of the A. M. A., the exposures of the fake medical concerns and the methods employed by the fakes. The association has done a great work in getting fraud orders issued by the Government against mail-order fakers, which means that when the mails are closed to their corrupt practices they die a natural death. It seems that if the society was accomplishing nothing else our annual payment of five dollars would be well spent.

The annual meeting of the A. M. A., will be held at Los Angeles, June 27-30, 1911. M. L. Harris, chairman of the committee on transportation(100 state St. Chicago,) is receiving applications for any one who desires to go on a special train or for any group of members who would care to have their own special. As is well known there are three prominent routes to the far west: the southern route through Arizona, New Mexico, etc., taking in the Grand Canon; the central route through Colorado, the beautiful mountain scenery of the Rio Grande, etc., and the northern route, taking in Yellowstone Park and the magnificent Shasta trip along the mountain range of the Pacific slope.

This will be a fine opportunity to visit the Pacific coast and while on the way, see the grandest scenery in the world.

The time is fast approaching for the annual meeting May 3-4-5- at Kansas City, Kansas. It is planned to make this meeting the banner one in the history of the society. The society will have for its guests, Dr. Bransford Lewis of St. Louis, who will read a paper on a subject which will be announced later, and Dr. H. W. Woodruff, President of the Chicago Ophthalmological society, who will read a paper on Injuries to the Eye. It is the intention of the committee to provide clinics for the two guests either before or after the meeting. It is also planned to make the entertainment of the members a feature of the meeting special provision being made for the ladies. Now is the time to commence making preparations to attend. Lay off the burden, take a vacation, freshen up and lend your hand toward the largest and best meeting the society has ever had.

The state Board of Health is endeavoring to have passed by

the legislature a standard registration act which will enable them to secure vital statistics that will be acceptable throughout the country and by the Federal Sessions. This act has been reported favorably by the committee of both the House and Senate and is now on general orders in both bodies.

Next, perhaps in importance is a law providing for the proper remuneration of County Health Officers and creating a standard for them. Also a law creating a school for Public Health Officers at the University at Lawrence, to continue for one or more weeks during the summer and to require the attendance of County Health Officers at the expense of the County.

In addition to this is a law providing for the disinfection of school buildings during the summer vacation and following any outbreak of epidemic diseases.

The importance of these bills can not be questioned and they ought to be passed.

As has been said before the columns of the Journal are open for a discussion of all questions effecting the interests of the medical profession of the state of Kansas and the members of the society are urged to air their views on any question they may deem of sufficient import or of any import for that matter, which concerns legislation, education or the uplift of the profession in any manner possible. The editor will not set himself up as a mouth piece of the society to decide (editorially) all questions of a public character but will endeavor to give every one who will take advantage of it, an opportunity to voice his or her sentiments on any medical question whatsoever. It is hoped that this will be taken in the spirit in which it is given, and that our editorial columns will hereafter be filled with an abundance of material which will be of great value to the profession.

The "egg" is now the subject of an attack for its part in the causation of disease. Dr. R. C. Rosenberger (N. Y. Med. Jour. Dec. 31, 1910.) says that if so-called heated or "spot" eggs contain putrefactive bacteria and if kept in a mixture (for instance salad dressing, milk punch, etc.,) for some time, poisonous products are generated which cause symptoms of gastro-enteritis and simulate very closely cases of meat poisoning. It can be readily seen that a highly toxic substance develops in food prepared from eggs of this character and he directs attention to a new source of danger to which little or no thought has heretofore been given. It is the authors opinion that the most rapid and

efficient method of determining fresh eggs is by the candling process, by an expert. Also, to remember that fresh eggs are hard to mix the yellows and whites and the admixture of the yellow and white is accomplished in stale eggs by a very little jarring. These points should especially be remembered in the treatment of tuberculous cases where many times raw eggs in punches, etc., makes up a large part of diet.

Vaccination as a preventative for typhoid fever is destined to be one of the discoveries of the past few years. It is being used by a number of investigators on a large number of individuals, and with gratifying results. For instance, Geo. H. Torney, Surgeon-General of the U. S. Army, in his annual report ending June 30th, 1910, says: "That of the 11,338 vaccinations for the prevention of typhoid fever, made in the army service there were only three cases of typhoid fever developed. One case developed within the incubation period, and the other two cases were mild and a diagnosis would have been in doubt had it not been for blood cultures. No deaths resulted. Of the 74,450 men who were not treated, 306 cases of typhoid fever developed with 56 deaths. The cases that were vaccinated were not picked from any locality but were taken at the same points as the cases not vaccinated." With this valuable data before us it sounds like the death knell for typhoid fever will be sounded in a very few years.

SOCIETY NOTES.

The Douglas County Medical Society, at its annual meeting, held in Lawrence, January 10, elected Dr. George W. Jones, president; Dr. Harry L. Chambers, vice-president; Dr. Leon Matassarini, secretary, and Dr. Eugene Smith, treasurer, all of Lawrence.

At the annual meeting of Leavenworth County Medical Society, January 9, the following officers were elected: Dr. Harley J. Stacey, president; Dr. Charles J. McGee, vice-president, and Dr. Jacob L. Everhardy, secretary-treasurer, all of Leavenworth.

Neosho County Medical Society at its annual meeting elected Dr. William E. Royster, president; Dr. William E. Barker, vice-president; Dr. Andrew M. Davis, secretary; and Dr. Ralph A. Light, treasurer, all of Chanute.

Shawnee County Medical Society, at its annual meeting in

Topeka, elected Dr. Melancthon C. Porter, president; Dr. Samuel A. Johnson, vice-president; Dr. H. Milton Connor, secretary, and Dr. John N. Beasley, treasurer, all of Topeka.

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Reno County Medical Society, at its annual meeting, held in Hutchinson, elected Dr. Charles S. Evans, president; Dr. Harry H. Heylmum, vice-president; Dr. John W. Young, secretary; Dr. William F. Schoor, treasurer, and Dr. Claude M. Roberts, censors, all of Hutchinson.

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At the seventh annual meeting of Bourbon County Medical Society, held in Fort Scott, Dr. Charles A. Van Velzer, Ft. Scott, was elected president; Dr. James S. Cummings, Bronson, vice-president; Dr. John D. Hunter, Fort Scott, secretary, and Dr. Charles F. Harrar, Ft. Scott, treasurer.

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The Labette County Society met Jan. 25th, in the Oswego House, Oswego, for their regular monthly meeting. Dr. P. W. Barbe presiding. Numerous clinical cases were reported and several patients shown. Dr. Morrow, of Altamont, read a report on 606, expressing the opinion that the drug, while valuable, had been overestimated. Hon. F. M. Brady, of Oswego, read a paper on "Expert Opinion Evidence," going rather fully into the legal view of expert testimony, especially as it pertains to medical testimony. After the meeting Dr. Barbe, the new president, entertained the Society at a banquet.

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NEWS NOTES

Dr. Oscar M. Owensby and Miss Bessie Myrtle Frazier, both of Pittsburg, were united in marriage Dec. 31st, 1910.

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Dr. A. L. Sheldon and family, formerly of Anthony, have returned from a seven year's sojourn in West China and Thibet.

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The State Board of Medical Examination and Registration will meet at Topeka, Feb. 14, 1911. Dr. H. A. Dykes, of Lebanon, is the Secretary.

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The corner stone of the new Bethany Hospital, Kansas City, was laid recently with appropriate ceremonies. The building is to cost \$160,000, will be five stories and basement in height, and will accomodate 153 patients.

The Northeast Kansas Medical Society held its semi-annual meeting at Topeka, Feb. 9th. An account of its proceedings will appear in the March issue.

Dr. John W. Ekblad and Miss Elda Downing, both of Scandia, Kansas, were united in marriage January 4th.

In a fire at Moline, January 11, which destroyed property valued at \$50,000, Dr. John W. Farrow suffered the total loss of his office.

A fire, January 2, in Wichita, caused damage of \$135,000, and destroyed the office and equipment of Drs. Ernest E. Hamilton and Harry A. Johnson.

Dr. J. G. Walker, of Iola, received the New York Medical Journal's prize of twenty-five dollars for the best essay on "The Technic for Performing Circumcision." His article is published in the above mentioned Journal for Jan. 28, 1911.

The management of the Kansas City, Mo., General Hospital, is in a quandary as to what disposition should be made of a case of leprosy which was recently discovered there. The federal authorities were appealed to but they refused to take the case and the hospital authorities have about decided to give the patient his freedom. It is said to be the first case of leprosy that has been seen in Kansas City

The Council of the Kansas Medical Society held a meeting at Topeka, Jan. 17th, 1910. Matters concerning legislation were freely discussed and action was taken to try and rid the practice of "quacks" who are preying upon the populace of Kansas. The present editor was re-elected for another year. Dr. O. P. Davis, President of the Society, presided. The following members of the Council were present: O. P. Davis, Chas. S. Huffman, L. H. Munn, James W. May, H. B. Caffey, C. W. Reynolds, W. E. McVey, W. E. Currie, Arch D. Jones, C. S. Kenney, W. F. Fee and O. D. Walker.

CASE REPORTS.

Report of a Case of Quinine Idiosyncrasy.—Dr. W. H. Neel, Anson, Kansas. For the benefit of those who may use quinine

hydrochloride and urea as a local anesthetic, I would advise them to give their patient a test for quinine idiosyncrasy before using it very extensively. I have now under treatment a case in which there is a very decided exfoliation of the skin near the site of operation, involving the entire hand following the administration of 1-5 grain.

There was also some eruption over the rest of the body. This patient has always shown an idiosyncrasy for quinine.

Perforation of Uterus.—E. Gard Edwards, La Junta, Colo. (Journal A. M. A., January 21), reports a case of perforation of the uterus with transfixion of the contiguous mesentery and peritoneum by a bone crochet needle. The patient, a married woman, thinking herself in need of monthly regulation had introduced it herself and became anxious at its getting away from her. She suffered no pain but was much concerned in her mind. From lack of symptoms it was hard to convince her medical attendant of the conditions, especially since dilatation and exploration of the uterus failed to reveal any foreign body. She was brought to Dr. Edwards ninety miles by rail for an x-ray examination. There was then some tenderness on pressure and soreness in the left pelvic region. The examination revealed conditions as stated above and operation relieved the patient, who made a satisfactory recovery. The lack of pain, shock, hemorrhage or infection makes the case noteworthy in its way.

Idiosyncrasy to Aspirin.—In the Journal I recently read a communication in regard to idiosyncrasy to aspirin, of which I had an almost parallel case on November 19.

On the advice of a friend a young man took a five-grain tablet of aspirin for headache. In about one hour, still suffering, he took another, and then lay down on a cot in his office. In a few moments he arose and remarked to some one present, "I feel mighty queer, and can hardly see." He then looked in the mirror and exclaimed, "What is the matter with my face? I am going to a doctor!" He walked nearly two blocks to my office, and in attempting to walk up to the door (just three steps up from the pavement) fell, and then had to be assisted into my office. He hurried in without waiting to knock, and in a voice which indicated great distress, exclaimed, "Doctor, some one has poisoned me." This was probably about half-past one, and about an hour and a half after taking the first tablet. The mucous membranes of his eyes, nose, and mouth were very edematous.

The eyelids and lips were everted and swollen to twice the normal size, the conjunctivæ very much congested; the patient could hardly breathe through his nose at all. Tonsils and uvula were in a state of congestion, the articulation was very indistinct, and when the patient attempted to raise his voice to a higher pitch, it had a peculiar metallic sound, which would end with a muffled tone. The veins in his temples and throat were knotted, and in places were standing out like hard cords. I found his circulation 136, respiration 24, afterward going down to 12, temperature normal. His face was greatly flushed, and this, with the eversion and swelling of eyelids and lips, made him a ghastly-looking object.

I made him lie down on a cot, and as he seemed to have considerable trouble in breathing, removed his collar and opened his shirt. I had the nurse give him a hypodermic injection of digitalin, bathe his face, neck and head with hot water, and apply continuous hot towels, and keep him quiet. Later, as he complained of great pain in the shoulders and neck, I also applied continuous hot packs to those parts, and as the circulation remained weak, ordered hypodermic of strychnin. At half-past two he suddenly fell into a profound sleep; his circulation slowed down and became stronger, but respiration continued very slow, and seemed almost to stop at times. His slumber was so profound that the removal and the replacing of the hot towels did not seem to disturb him at all. I allowed him to sleep until nearly four o'clock, when I awakened him and had him conveyed to his home, which was about three miles in the country. He stood the trip all right, and after getting into bed he almost immediately fell asleep again. In about three days the edema had disappeared from his nose, eyelids and mouth, but the throat remained irritated for at least ten days longer, and the patient was slow in regaining his strength.

The report of H. E. W. and this case show that some have a decided idiosyncrasy to this drug, and that it should be listed as one of the dangerous drugs, which should not be retailed indiscriminately to the laity. Cyrus Graham, M. D., in Journal A. M. A., January 28, 1911.

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MISCELLANEOUS

"Professor" Samuels and His Eye Water.—A recently introduced quack preparation, largely advertised by "Prof." H. Samuels of Wichita, Kan., is noticed in The Journal A. M. A., De-

cember 24. Samuels uses the common methods of circular letters made to imitate typewritten communications, symptom blanks, testimonials, etc., and extensive use of the public press. A third of a city daily's page thus employed is not unusual for a single advertisement. He emphasizes two points in his advertising. First, that he wishes "hard cases" that the regular doctor can do nothing for; and second, he wants it generally known that he has been arrested many times for irregular practice. His remedy consists of an "eye water", which is claimed to have cured ovarian tumor, "paralysis of the optic nerve," deafness, tuberculosis and various other ills. Two specimens of the eye water alleged to be used by him were sent by correspondents to The Journal A. M. A., from whom it was learned that \$25 an ounce is charged for the stuff. Examinations of the larger of the two samples, one being too small for quantitative tests, gave practically the following as its composition. Equal parts of sodium chorid and sugar, 7.5 grams in 100 c. c. of water. The approximate cost of the solution to the maker would be about 6 cents a gallon, its selling price, \$25 an ounce. It is clear why this advertiser wants only hard chronic cases. The credulity and un-failing optimism of the chronically ill is in his favor; the less scientific the treatment and the more improbable its claims, the greater its success.

MINISTERS PREPARE A BILL.

Iola Association Starts a State Wide Campaign.

Want Legislature to Compel all "Healers" to Conform to Regulation By State Board.

The Iola Daily Register January 7, 1911, prints the following:

Active agitation to crystalize statewide sentiment in favor of a stricter supervision of healers and all persons who essay to treat the sick has been started by the Iola Ministerial Association the determination reached at a recent meeting of the association. The ministers are sending out copies of their resolutions to the ministerial associations of cities of the states to enlist their aid in bringing pressure to bear upon the legislature to pass a law which will regulate the practice of healing, eliminating all who are unable to demonstrate their fitness and qualifications to treat the sick.

The following is a copy of the resolution being sent broadcast over the state: To The Ministerial Association of Kansas—Brethren:

We, the "Ministerial Association of Iola, Kansas and Vicinity," seek your co-operation in bringing before the legislature, which meets January 10, 1911, some measure looking toward the more equitable regulation of the practice of the healing art within our state. A large and growing class of 'healers' and "practitioners" of various names, forms and cults, offer their services to the sick and appeal to the public for patronage. They are unlicensed and therefore irresponsible so far as regulation by the state is concerned. At the same time they are for the most part ignorant of that scientific knowledge which would enable them to make intelligent diagnosis of disease, to discover contagious diseases, and to understand the true limits of their ability, thus causing much needless suffering and numerous untimely deaths.

We believe that in the interest of common justice and for the safeguarding of the public health, the laws of our state should be so amended or revised as to require *all* who assume to treat the sick by whatever method to secure a license for the same from the proper state board of examiners after suitable examination as to their qualifications. To this end we solicit your co-operation.

We are prompted to this action by the case referred to in resolutions adopted by us, published in the Iola Daily Register, December 2nd, 1910, and afterwards endorsed by the Allen County Medical Society, and which read as follows:

"We, the 'Ministerial Association of Iola and Vicinity,' desire to express to the public:

'1. Our unqualified condemnation as fanatical, cruel and wicked, of such gross neglect of the sick and suffering as recently resulted in the untimely death of a young wife and mother in our city, said neglect being due to the teaching and practice of certain quacks and fake healers, who, without proper knowledge of medical science, teach and practice in the name of religion and science, the religion being anti-christian and the science being 'falsely so-called.' And

"2. Our conviction that such inhuman neglect and its fatal results become a proper subject for investigation and action by the civil authorities; and that our present laws are inadequate to meet such conditions, this inadequacy should be at once remedied.

We also enclose other resolutions adopted by us and ask you to address your Senator and member of the House of Representatives, both by letter and by resolution, urging them to careful consideration of the bill which may be presented looking to the above described legislation. We also suggest that you send

a copy of letter and resolution to Dr. O. P. Davis, president of the State Medical Society, at Topeka, Kansas.

Signed:

J. H. PRICE, Pastor First M. E. Church.

W. H. OWEN, Pastor First Baptist Church.

S. S. HILSCHER, Pastor First Presbyterian Church.

Iola, Kansas, January 4, 1911.

In addition to the foregoing resolution the ministers have prepared and adopted the following in the nature of a petition to members of the state legislature to pass the enactment desired:

"Inasmuch as our present state laws regulating the practice of medicine and surgery do not include within their provisions a class of 'healers' and 'practitioners' of various names, forms and cults, many of whom are manifestly without that scientific knowledge which would make it possible for them to diagnose disease, to detect contagious diseases and to define the limits of their own ability; and

"Whereas, we believe it is only simple justice and a proper safeguard to the public health that by state legislation a more uniform supervision be established over those who assume to treat the sick; Therefore be it resolved

"1. That we most respectfully petition our state Senators and members of the House of Representatives, to sustain by their voice and vote such wise measures as may come before them, looking to the enactment of such laws as will require *all* who assume, by whatever method, to treat disease, to secure a license therefor from the proper state Board of Examiners, after suitable examination as to their qualifications. And

"2. That we send a copy of these resolutions to our state Senator and member of the House of Representatives, respectively, and to Dr. O. P. Davis, President of the Kansas State Medical Association, Topeka, Kansas.

"Adopted by the 'Ministerial Association of Iola, Kansas and Vicinity,' January 3, 1911."

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CLINICAL NOTES

Puerperal Eclampsia.—F. J. Plondke, St. Paul, Minn., (Journal A. M. A., January 14), describes his method of treating puerperal eclampsia by combined venesection and infusion. Nearly all pathologists, he thinks, agree that the convulsions and concurrent symptoms are the results of irritation of liver and kidney cells, and of the cerebral centers by toxins circulating in and dis-

tributed by the blood-current. He follows with modern precautions as to antisepsis and prevention of air in the vein, the usual technic of phlebotomy, using a double ligature, one above and one below the incision into the superficial vein. After withdrawing a certain amount of blood from the distal portion and at the same time infusion into the proximal end of normal salt solution at the proper temperature, in both cases through thin-walled glass canulas, the ligatures are drawn tight and the vein closed. The amount of blood withdrawn by him ranged from 15 to 32 ounces; the quantity of normal salt solution introduced varied from 1 to 2 quarts and averaged about 40 ounces. He claims nothing new in the operation except the combination of the two methods, infusion and withdrawal of blood, taking away some of the circulating toxin and diluting the remainder. Three cases are reported in which the method was used with success.

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An Easy and Painless Method of Removing Adhesive Plaster.—

Such a frequent and simple procedure as the removal of adhesive plaster from the skin of a patient is not infrequently accompanied by considerable pain and discomfort. Especially is this true if the plaster has been placed over hairy surfaces, or if the hair has grown subsequent to the application of the plaster. The usual method of aiding the removal of the plaster by the use of benzine, alcohol and peroxid of hydrogen are not particularly effectual while, in themselves, these agents often add to the patient's discomfort.

I discovered by accident that oil of wintergreen when applied to adhesive plaster removed completely the adhesive elements in a very short time and since that time I have found this agent a most useful one for this purpose. It is necessary only to use a small amount of the oil, which is applied directly to the plaster and easily spreads itself throughout the adhesive material. As far as I am aware this agent is not in common use for this effect and as the aim of a physician or surgeon is to relieve instead of causing pain it seems well to call the attention of the profession to the value of the method. When extensive areas of plaster are to be removed the application of an ointment of *adeps lanæ hydrosus* with 10 per cent. of oil of wintergreen incorporated is even more useful than the oil alone.—E. J. G. Beardsley, M. D. in *Journal A. M. A.*, Jan. 28, 1911.

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Cough Mixtures from the Roosevelt Hospital Formulary.—The following combinations are kept as stock mixtures in the Dis-

pensary of the Roosevelt Hospital, New York:

Cough Mixture No. 1.

- R Morphine sulphate.....gr. i;
 Ammonium chloride,.....gr. xl;
 Syrup of tolu,.....℥ss;
 Water, sufficient to make,.....℥iv.
 M. et Sig: Two teaspoonfuls as needed.

Cough Mixture No. 2.

- R Potassium cyanide,.....gr. ss;
 Morphine sulphate,.....gr. ss;
 Fluid extract of wild cherry,.....℥iss
 Syrup, sufficient to make,.....℥iv.
 M. et Sig: Two teaspoonfuls as needed.

Children's Cough Mixture.

- R Ammonium chloride,.....gr. lxxx;
 Camphorated tincture of opium,.....℥ii ʒ xl;
 Syrup of squill,.....℥ii ʒ xl;
 Syrup, of tolu sufficient to make,.....℥ii.
 M. et Sig: One teaspoonful as needed.

Hydrocyanic Cough Mixture.

- R Codeine sulphate,.....gr. iv;
 Ammonium chloride,.....gr. xlviii;
 Diluted hydrocyanic acid,.....ʒ xlviii;
 Syrup of wild cherry,.....℥i;
 Water, sufficient to make,.....℥ii.
 M. et Sig: One teaspoonful as needed.

Ipecac Cough Mixture.

- R Ammonium chloride,.....gr. lxxx;
 Wine of ipecac,.....ʒ lxxx;
 Camphor water, sufficient to make,.....℥iv.
 M. et Sig: Two teaspoonfuls as needed.

Sanguinaria Cough Mixture.

- R Ammonium carbonate,.....gr. lxxx;
 Tincture of sanguinaria,.....ʒ lxxx;
 Syrup of wild cherry, sufficient to make,.....℥ii.
 M. et Sig: One teaspoonful as needed.

Squill Cough Syrup.

- R Tincture of squill,.....ʒ lxxx;
 Wine of ipecac,.....℥i;
 Syrup of tolu,.....℥v;
 Water, sufficient to make,.....℥ii.
 M. et Sig: One teaspoonful as needed.—N. Y. Medical Journal.

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GALL STONES AND THEIR DIAGNOSIS.

CHARLES J. MCGEE, A. B., M. D., Leavenworth, Kansas.

Read before the Northeast Kansas Medical Society Oct. 27, 1910.

The gall bladder is a pear-shaped, fibromuscular viscus, about three or four inches in length, lying in the fossa vesiculis. The fundus projects slightly beyond the anterior border of the liver, touching the abdominal wall just below the ninth costal cartilage. The neck, much narrower than the fundus, curves upon itself, forming the cystic duct which is from one to three inches in length. The cystic duct joins with the hepatic to form the common duct which opens into the duodenum a little below the middle of the inner side.

Among the predisposing causes of gallstones are: (1) Females between the ages of forty and sixty; (2) Excessive diet of starches and fats combined with sedentary life; (3) General as constipation, lacing, and chronic obstruction to the flow of bile. Biliary retention produces an increased consistency of the bile, causing a precipitation of the salts formerly held in solution, and thus favoring the formation of calculi.

The presence in the bladder of such germs as the bacilli coli communis, bacilli typhi abdominalis and the streptococci may be mentioned as some of the exciting causes.

Biliary calculi may exist in the gall bladder and in other parts of the biliary passages without causing the individual any discomfort. Post-mortems show that many persons carry large gall stones throughout the greater portions of their lives without experiencing any inconvenience. Again, calculi may be so small that

they pass into the duodenum without causing pain; from this we see that there are two extremes in which gall stones may exist without the knowledge of the individual. (1) Cases where the stones are very small; (2) Those in which one or more large calculi are present.

The intensity of the pain will vary according to the shape and consistency of the concretions. A large soft concretion which can be moulded to the shape of the duct will be more easily passed and will cause less pain than a smaller, hard one of an irregular shape. Again a uniformly round calculus will cause less pain on passing than one of the same size with angular projections.

There are two points in the passage of a gall stone where lodgement is most liable to occur: (1) in the cystic duct; (2) the point where the common duct passes into the duodenum. The common duct being composed of the cystic and hepatic, is much larger than the cystic, consequently, a stone that will pass through the cystic duct will pass through the common with much less discomfort, unless some abnormal condition exists. The second point is the opening of the common duct into the duodenum. The duct is joined here by the pancreatic duct and together they pass obliquely downward and inward through the coats of the bowel for three-quarters of an inch. This is the narrowest point in the passage of any stone. It not infrequently happens at autopsies that a number of stones are found lodged there, being unable to pass the narrow point beyond.

The operator should feel all along the ducts, and especially in the region of the diverticulum of Vater. It sometimes happens in patients with thin abdominal walls, that enough stones form in the bladder to cause it to sag below the free margin of the liver, and the stones can be felt with the fingers.

A stone in the cystic duct may act as a ball-valve, causing an accumulation of mucous which is normally secreted from the walls of the bladder. When the bladder has reached a certain size, the pressure causes the neck of the duct to dilate, allowing the stone to fall back in the bladder. The accumulated mucous escapes and the bladder returns to its normal size. If the stone becomes firmly fixed in the cystic duct, as it sometimes does, by getting into the valve of Heister, the bladder becomes permanently distended.

Inflammatory conditions may cause the formation of a thick ropy mucous, which may plug the cystic duct almost as effectually as a calculus. This condition may be brought about by a twist in the cystic duct. Again the weight of a large number of calculi may cause partial obliteration of the cystic duct.

A thorough examination in the region of the margin of the liver in all cases of suspected gall stones should always be made. If any enlargement is found it is generally safe to conclude that there is a distended bladder with gall stones. There may be a linguiform process reaching from the margin of the liver which may be difficult to distinguish from a distended bladder. Many authorities consider this condition pathognomonic of the presence of calculi. The gall bladder may protude to one side or the other of the process and in these cases may be distinguished from it. An enlarged gall bladder may extend down toward the right iliac region, in such cases simulating an ovarian cyst or a hydronephrosis. But in cases where dullness on percussion can be followed down from the liver, the true nature of the case can be determined.

Jaundice is seldom present but it is not necessarily a symptom in cases of impaction of the cystic duct, although it is inevitably the result of occlusion of the hepatic or common duct. When there is complete obstruction of the cystic duct no bile can pass back from the hepatic or common ducts; the bladder will then contain the mucous which is normally secreted from its walls, mucin, cholesterin, and, in case an inflammatory condition exists, serum and fibrous exudations, lymph, pus and occasionally a few red corpuscles. In case the impaction is permanent, the bile present will be absorbed, the liquid becoming a straw or amber color. The longer the obstruction lasts the clearer the contents become until it consists entirely of mucin.

Before taking up the symptoms of stones in special locations, let us turn our attention to some of the general symptoms. There is often a constant loss of body weight and the patient complains of attacks of indigestion." There is an uneasiness in the region of the gall bladder, with tenderness on deep pressure which may also be elicited by suddenly forcing the fingers into the region of the gall bladder. Hepatic colic manifests itself whenever a stone becomes impacted in a duct. The pain in hepatic colic is due (1) to the slow process in the cystic duct, in which the stone takes a rotary course owing to the arrangement of the Heisterian valve; (2) to the acute inflammation; (3) to stretching of the bladder by retained secretions. It is distinguished by intense pain in the epigastrium and hypochondriac region, radiating to the back and right shoulder. The pulse is slow and there may or may not be a rise of temperature. Nausea and vomiting are also present and there may or may not be jaundice. Some points as to the location of a stone may now be taken up, the only one of real importance being as to whether it is in the common duct.

1. Stone in the cystic duct may have an enlargement of the bladder due to an accumulation of secretions. Pain is of a constricting character and gradually increases in severity. There may be a rise of temperature, or the temperature may become subnormal. Jaundice is not present unless there has been some destruction of the lining of the bladder, and when it is a symptom it comes on in the course of two or three days.

2. Stone in the common duct. There may be history of a previous attack of hepatic colic and jaundice. The pain is intense, pulse is slow, which shows the absorption of bile. There are chills which may have a distinct periodicity. The gall bladder may be enlarged. In these cases jaundice is always a symptom. Among other important symptoms are alcoholic stools, itching of the skin, bile in the urine and perspiration, inability to digest fats, flatulency and pain in the region of the common duct.

3. Stones in the hepatic duct are of very rare occurrence. There are no chills or elevation of temperature, no enlargement of the bladder and the pain is not intense.

As the subject is of considerable importance the diagnosis of a distended gall bladder should receive a good deal of attention. One of the following pathological conditions may be confounded with it.

1. Ovarian cysts. Cystic enlargements of the right ovary have often been found so far up as to be mistaken for a distended gall bladder. Firm adhesions may hold the cyst to the margin of the liver but as a rule there should be no difficulty.

2. Floating or movable kidney. Both are found more frequently in women than in men. Again, floating or movable kidney is found at least thirteen times more frequently on the right side. In distinguishing between a distended and enlarged gall bladder and a floating kidney of the right side, the previous history should be carefully taken in order to bring to light any previous attacks of hepatic colic, jaundice, or evidence of inflammation or uneasiness in the region of the gall bladder or biliary ducts. A floating kidney has great freedom of motion and may rise close up under the abdominal wall. The most prominent symptom of a floating kidney is a dull heavy pain, dragging in character, shooting along the abdomen to the thighs. Frequently this pain is felt quite distinctly in the labia or scrotum as the sex may be. Percussion over a floating kidney elicits a note more or less tympanitic, for the colon lies over the kidney, but over a distended gall bladder a dull note is produced. A distended gall bladder moves downward with inspiration and expiration. Respiration has no effect on a floating kidney, but the mass has a tendency to slip away with a sudden

jerk when pressed upon. By inflating the colon with gas in patients with thin abdominal walls, the distended gall bladder is pushed forward, but the kidney backward and upward. Differences, easy to put on paper but hard to put in actual practice, but by putting the patient under an anaesthetic the diagnosis can be intelligently established.

3. Hydronephrosis. The size which a distended kidney may attain is variable. In many there is little or no pain; in others a great amount. Both kidneys are affected in about one-third of all cases. Like a distended gall bladder, it may vary in size for an identical reason. From assuming different positions of the body a calculi may be dislodged and allow urine to escape, with a diminution in size of the tumor in a short time. When this is associated with a sudden increased flow of urine, a strong suspicion of hydronephrosis should be entertained.

4. Linguiform process of liver. A deformity which consists of a tongue shaped process,, developed from its lower edge reaching down to the extent of three inches, when present may lead to a difficulty of diagnosis. This condition is acquired and is the result of gall stones. Its presence is pathognomonic as already stated.

5. Growths in head of pancreas. Tumors of the pancreas may be mistaken for a distended gall bladder. Cysts of the Pancreas are exceedingly rare; when present they are generally centrally located, deeply seated, fluctuate and are not influenced by respiration. By puncture a clear, viscid fluid containing an abundant amount of albumen is obtained.

Differential diagnosis. In order to establish the presence of biliary calculi the following possibilities must be eliminated.

1. Gastralgia, which occurs in individuals of neurotic tendencies, is characterized by severe paroxysms of pain in the epigastrium, extending to the back and base of chest. Firm pressure often relieves the pain for a time, also eating when the stomach is empty. There is no fever, jaundice or stones in fecus.

2. Intestinal colic. Pain, is boring or twisting in character usually centering at the umbilicus. Pressure relieves. There is a history of an indiscretion in diet. Flatulency is also a symptom. If due to lead poisoning a blue line along the gums is seen, also the wrist drop.

3. Reflex colic, due to uterine or ovarian disease. Symptoms point to pelvic troubles.

4. Renal colic. Pain begins in the flank on the affected side and is transmitted down the ureter. It is also associated with pain in the testicle or labia, as the case may be, shooting down the inner

side of the thigh.

5. **Appendicitis.** Appendicitis frequently complicates gall stones, but the diagnosis is usually easy, the pain becoming localized in the right lower abdomen, tenderness at McBurneys point, and a high leucocyte count, aiding the differentiation from gall stone colic. A rectal examination of the right side will reveal extreme tenderness in case of appendicitis.

SOME REMARKS ON PLACENTA PREVIA.

FRANK A. CARMICHAEL, M. D., Goodland, Kansas.

Read before a Joint Meeting of the Western Kansas Decatur and Norton County Medical Societies at Norton, Kansas, September, 1910.

The time allotted for the preparation of this paper has been insufficient for an adequate review of the literature bearing on placenta previa.

For the sake of brevity and also to avoid a discussion of phases of this condition more or less familiar to you all, such factors as etiology, pathology, and symptomatology will be omitted, and the effort devoted to the presentation of the present method of treatment supplemented by such statistical data as I am able to gather from the literature at my command covering the past year only, and presenting a case of central placenta previa with a treatment entirely at variance with the present accepted methods, with an attempt to justify the procedure, or rather lack of procedure, in this case. It appears that the bulk of the literature as well as the principal statistical data upon this subject originates from the great German clinics and the methods of dealing with this condition have embraced a variety of procedures. The tampon, elastic bag, vaginal Cæsarian section, version with and without immediate extraction, classical Cæsarian section as well as the supra symphyseal celio hysterotomy by Pfannenstiels method. It may be safely said that advances along the line of satisfactory treatment of this condition has not progressed with the rapidity and certainty of other obstetrical procedures, the maternal mortality still remaining relatively high and the foetal mortality hardly influenced by the advances of the past five years.

Maisson (1) reports 154 cases treated by elastic bags, tampon rupture of the membranes and version, with a maternal mortality of 14 per cent and a foetal mortality of 78.5. He regards the tampon as a dangerous method both from its inadequacy in preventing hemorrhage and from the possibility of infection from it. Of

his series, 31 cases were treated by Braxton-Hicks version without extraction with a maternal mortality of 10 per cent, and a foetal mortality of 80 per cent. Twenty two were treated by version with extraction with no maternal mortality, and 60 per cent for the foetus.

Hauch (2) reviews 240 cases from the Copenhagen clinic. These cases occurred in 24,000 parturients. The maternal mortality was 19 per cent of the entire series. In 144 cases including 60 cases of central placenta previa, elastic bags were used with a maternal mortality of 11.1 per cent.

In 96 cases the bag was placed outside the ovular cavity, with a maternal mortality of 15.6 per cent, and in 48 cases, the bag was placed inside the membranes with a maternal mortality of 2.1 per cent. Braxton-Hicks version with immediate delivery was performed in 18 cases including 6 in which central implantation of the placenta existed, without a maternal death. The mortality was slightly higher among multipara.

Kupferburg (3) refers to the statistics existing before the introduction of Braxton-Hicks method of version, where the maternal mortality was 50 per cent and the foetal mortality 90 per cent, and his recent review of the literature places the present maternal mortality at 20 per cent, and foetal at 60 per cent in general practice, and 6 and 20 per cent respectively in hospital practice. The error in statistical compilation is nowhere more manifest than in this statement. While possible, it is decidedly improbable that the actual variation in the mortality of general and hospital practitioners is as great as his figures indicate. If so, it would be a sad reflection on the skill and judgment of the general practitioner.

Statistics of this condition in order to convey an adequate comprehension of the true general mortality, should be compiled from a great clinical field, embracing all classes and conditions of practice.

King Solomon said, "Of the writing of books, there is no end" and likewise in a perusal of the literature we find every year the contributions of an army of writers in relation to placenta previa, covering the same field and reiterating in the main, the same dogma. Thus in the past year, Ruage (4) Schanta (5) Pfannenstiel (6) Calzalora (7) Zemmerman (8) Richter (9) Pankow (10) Sellheim (11) Nova (12) and many others have tabulated exhaustive statistics on the mortality and method of treatment in nearly all the large German clinics, with the result that we find ourselves confronted by practically the mortality that existed five or ten

years ago, without an appreciable advance in our methods of treatment.

What concerns us most as general practitioners is how shall we, without hospital facilities and with our meagre equipment, handle these cases, because we cannot be so fortunate always as to be able to unload them on our hospital brethren.

Many of the measures employed in hospital practice are impractical for us, besides it has been thoroughly demonstrated that a great many of the newer methods practiced, are justifiable only under unusual conditions. We have recourse therefore, to the alternative of the tampon version or the elastic bag, a discussion of which I hope will be elicited by this paper.

Of the methods at the command of the general practitioner, particularly in the rural districts, we have the elastic bag and version, with or without immediate extraction, the use of the vaginal tampon having proven both inefficient in the control of hemorrhage and dangerous from the probability of septic infection. The advantages of the elastic bag seem obvious only in those cases where it is possible to insert it within the ovular cavity. When inserted outside of the ovum, this method would not appeal to the average practitioner from the fact that it does not prevent hemorrhage, but simply conceals it. The introduction of the elastic bag within the cavity of the ovum is not untended by grave danger, (1) from dislodgement of the placenta in an effort to perforate it, (2) from possible sepsis, and (3) from traumatism. The fact has been demonstrated that the site of the placental attachment is particularly vulnerable both to traumatism and infection, and lacerations sometimes of a fatal character follow the employment of all artificial means of dilatation. Again, the type of elastic bag used must be considered. The ordinary colpeurynteuer or hysterinteuer is not suitable for these cases, except where version follows its use, as the convexity of its base within the uterine cavity is apt to displace the head and promote a shoulder presentation, the mechanism of labor being such that the convexity is prone to deflect the head and fit into the angle formed by the junction of the neck and shoulders. The Champonaire de Ribes bag possesses a distinct advantage in this respect, that its base is flattened, it is usually somewhat larger and produces more efficient dilatation. Its relative disadvantage exists in the fact of its greater difficulty of introduction, particularly if the placenta must be perforated, and because it is found but rarely in the armamentarium of the average general practitioner. My experience in the use of the elastic bag for the pur-

pose of dilating and softening the cervix, vagina and perineum leads me to think it is much less efficient than commonly considered.

In all probability, version will remain the principal resource of the rural practitioner, inasmuch as it is the most convenient, and the maternal mortality following the method compares favorably with that of other procedures.

Inasmuch as the viability of the foetus in these cases is so seriously compromised both from the prematurity and circulatory inanition, the slightly increased mortality for the infant from this procedure is balanced by the lessened maternal mortality.

Were it possible to send all these cases to the hospital, the general practitioner would be relieved of a great responsibility, but unfortunately, these cases frequently develop under conditions that make it impossible to transport them, and we are forced to fight it out with such facilities and equipment as we possess. The following case is illustrative:

On April 3, I was called to see Mrs. P., a 3 para six months pregnant. She had experienced a sudden painless hemorrhage without any known cause. Both perineum and cervix had been badly lacerated in her first confinement, and she presented a history of chronic endometritis and a uterine prolapse of the first degree. The os was not dilated, and there was no pain although the hemorrhage had been quite severe. A diagnosis of placenta previa was made and the patient informed that it would be better if she would go to the city where she would have the benefit of hospital care, which she readily agreed to do as soon as possible. The immediate treatment consisted of absolute bed rest in the dorsal position, with the foot of the bed elevated, and the use of the ice-bag. Medication was withheld because of the fear of bringing on labor. The hemorrhage ceased in 24 hours, and I did not see the patient again until the morning of May 23rd, when another severe hemorrhage occurred. The vagina was tightly packed with gauze and the patient advised to take the first train to Denver, where her people resided. This would not go through until evening, and it was hoped that the packing would control the hemorrhage until such time as she could reach the hospital. I was out of town during the afternoon and evening, and did not see the patient again until 9:00 P. M. In my absence, another physician had been called, because of renewed hemorrhage had administered a hypodermic of morphine and strychnin, had examined the woman and found the placenta covering the external os, with about three fingers dilatation. Hemorrhage con-

tinued profuse for about two hours and the patient's pulse went to 110 after which labor pains developed more strongly, the hemorrhage became less and a later examination showed dilatation progressing favorably. One margin of the placenta prolapsed and was firmly wedged against cervical ring by the pressure of the unruptured membranes. Under these conditions we deemed it justifiable to wait, trusting in the integrity of the membranes which we were very careful not to rupture, but having prepared for rapid interference in case it became necessary. About 7:00 A. M., the membranes ruptured with immediate birth of a dead child, and immediate expulsion of the placenta, which you will see from the specimen is a true placenta previa centralis.

The patient made a satisfactory convalescence, but suffered from anemia for a couple of months. However, she is now again pregnant, past the third month. The justification of the procedure will be attempted in the discussion.

We occasionally encounter these cases in our general practice, because (1) the initial hemorrhage is not reported by the patient, (2) because its significance is not appreciated by the attendant and (3) because many patients are unwilling through prejudice or lack of means to avail themselves of hospital advantages.

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SALVARSAN.

N. C. MORROW, M. D., Altamont, Kansas.

Read before the Labette County Medical Society, Jan. 28, 1911.

606. Arseno-benzol, or Salvarsan as it has been christened for commercial purposes is an arsenic compound, having two molecules of tri-valent arsenic united respectively to each other and to two benzene radicals. In each of the benzene radicals one atom of H has been replaced by the amine group, NH_2 , and one atom of H by the hydroxyl or phenol group OH . The arsenic being in its trivalent form makes it a powerful reducing agent. The amine groups give it weak basic properties, enabling it to combine with acids to form salts. Salvarsan the commercial product is the hydro-chloride. The hydroxyl or phenol groups give it the power to combine with strong bases (such as $Na OH$) forming phenolates. The basic properties imparted by the amine groups are so weak that where its salts are dissolved in water they are decomposed with the liberation of an acid. Addition of $Na OH$ causes a precipitate of the insoluble base, which is used in suspension for subcutaneous and intra-muscular injection. Fur-

ther addition of Na OH produces the soluble Na salt, which is used in solution for intravenous injection. So much for the chemical properties of 606. Now for its origin.

For a number of years Ehrlich has been working on the synthesis of drugs, starting from the basic idea that a specific chemical affinity exists between specific living cells and specific chemical substances. He believed that for each specific parasite a specific curative drug could be found. But such a curative drug must have highly parasitropic activities and negligible organotropic activities, in other words it must have the power of destroying the parasitic organisms, and yet leave the organic cells of the host uninjured. How the animal parasites causing malaria, sleeping sickness, relapsing fever, syphilis, etc., apparently cannot be successfully attacked by means of immune sera; hence their conquest must be attempted by means of chemical substances. So it is with this class of parasites that most of Ehrlich's researches have been conducted.

Because of the epidemic of sleeping sickness in Africa and because of the trypanosome is easily transferable to mice, he began working with trypanosomes. He soon succeeded in producing a new substance, trypan-red, which absolutely cured every infected mouse with one injection. This was the first time that an animal had been completely sterilized, i. e., that every one of the parasites within the body had been destroyed by one dose of a disinfectant. It was further discovered that if a smaller dose were used all the parasites would disappear from the circulation for a given time and then reappear. If the dose were repeated the parasites would again disappear only to return after a shorter interval. If several such doses were given a strain of trypanosomes would be produced on which trypan-red had absolutely no effect. And this power of resistance would be transmitted to their offspring for many generations. The demonstration that these parasites could so readily become resistant to chemical substances led to the conclusion that in order to permanently cure a parasitic disease it is necessary to destroy in the shortest possible time, i. e., by one injection, all the parasites in the body. This act of sterilization with one dose, Ehrlich designated as "therapia sterilisans magna."

Parasitropic drugs may be divided into two great classes. I. Those that have a highly destructive action on parasites outside the body and have no effect within the body, such as HgCL₂. 2. Those which have no effect whatever on parasites outside the body, but show a high sterilizing power within the body. Ob-

viously this new type of therapeutic agent belongs to the second class. Their action may be explained in two ways. 1. When taken into the body these substances are so changed that they become effective against the invading parasite. Ehrlich has shown this to be the case with atoxyl, which in test tube experiments has absolutely no effect on trypanosomes. If, however, atoxyl is reduced and mixed with a culture of trypanosomes it will destroy them in a dilution as great as 1 to 3 or 4,000,000.

The second explanation is, that the drug has an inhibitory action on some function of the parasites connected with reproduction, or that it destroys some component part of the parasite. This theory also has been proven by laboratory experiment.

In the course of these experiments a large number of chemical substances have been tried, as the number 606 indicates. But very few of them, four or five at most, have been found to have the requisite combination of high parasitropic and low organotropic activities. Most of them are substitution products of some other drugs of known parasitropic power. Arsenobenzol or 606 is a substitution product of atoxyl, a drug that has been used with some degree of success in sleeping sickness. When the potency of 606 against *spirochæta pallida* was discovered, it was first thoroughly tested in laboratory experiments, then cautiously administered to patients infected with syphilis, and finally it was placed in the hands of a number of competent observers in order to thoroughly test its efficiency and dangers before giving it to the profession at large. The reports made by most of these observers seemed incredible. The *spirochæta pallida* disappears completely in from one to three days after the injection. Intractable lesions that had resisted the usual specific remedies healed with astonishing rapidity, secondary eruptions disappeared as if by magic, and erosive chancres healed completely in a few days. In a large number of cases the Wasserman reaction became negative and remained so indefinitely. The most remarkable results were obtained in intractable tertiary lesions. This may be explained by assuming that there were already a large number of anti-bodies in the patient's blood which were enormously stimulated by the injection, or that the strain of *spirochæta* had become greatly attenuated. Of secondary lesions those on the mucous surfaces healed most readily, next the skin lesions of the moist type, while the dry scaly secondaries were but little improved. Of primary lesions the erosive chancre heals much more readily than the indurated type. Cases suffering from para-syphilitic diseases showed no improvement.

As to the technique of administering 606, it is complicated and difficult, and I shall merely give an outline of it. Already many modifications of the original technique have been devised, each carefully labelled with the name of its inventor. Their number and complications are confusing to the disinterested observer, and suggest the idea that possibly not all of them have been conceived from purely scientific or altruistic motives. Salvarsan the commercial product is the hydrochloride or arseno-benzol. When dissolved in water HCL is liberated making the solution strongly acid. This is exactly neutralized with Na OH which causes a precipitate of the insoluble base. This insoluble base is used in suspension for subcutaneous or intra-muscular injection. If the suspension is either slightly acid or alkaline the injection is very painful. When excess of Na OH is added to the precipitate it again goes into solution as the Na salt, and it is the solution of this salt that is used for intravenous injection. Ehrlich has recently recommended the use of intravenous method whenever possible. The subcutaneous or intra-muscular injection leaves an indurated, usually painful area from which the drug is absorbed slowly—As being found in the urine up to about the 10th day. By the intravenous method the remedy enters the circulation at once, action is more rapid, it is painless, and As disappears from the urine in about four days. Now, although the early reports are so favorable, the value of 606 in syphilis is far from settled. It was first administered to human beings some fifteen or sixteen months ago and most of the reports have been made within the past six months. How permanent the effects of this remarkable remedy will be cannot be determined for a long time. Further we must remember that it is an As compound containing about 35% of As. The dose is from four to six Gm. i. e. six to nine gr., so the amount of As injected at one dose is from two to three gr. Like various other new As preparations, the preliminary reports make it practically harmless and like them it will probably be found to be far from harmless in some cases. Already the later articles are reporting some untoward results and cases of recurrences are becoming not infrequent.

As to the place in specific medication arseno-benzol will ultimately take, I venture this prediction: Like Koch's tuberculin, atoxyl, and Wright's autogenous vaccines, it will not live up to the advance notices, but will be found to have a very limited field of usefulness. It will not displace mercury and potassium iodide in the treatment of syphilis, nor will it become the usual remedy, but it will prove a most valuable adjunct to these older remedies in certain intractable and hitherto incurable cases.

SUPPURATIVE OTITIS MEDIA, SOME ANATOMICAL AND PATHOLOGICAL CONSIDERATIONS.

C. L. ZUGG, M. D., Kansas City, Kansas.

Read before the Golden Belt Medical Society, Topeka, Kansas January, 1911.

In order to have a clear understanding of any subject the student must have the underlying principles firmly fixed in mind, and the more simple and clean cut these principles the more likely the student will be to become master of the situation.

To appreciate the above statements, one does not have to pursue the subject of otology to any great length. The object of this paper will be very briefly to review some of the various forms of suppurative otitis media from the various points of view, and in so doing endeavor to gather only that which will be of practical benefit and aid in unraveling some of the conflicting descriptions of ear lesions as given by different authorities. Classifications are usually made from (1) anatomical structures involved, (2) clinical symptoms and (3) pathological findings.

Anatomical Considerations. The middle ear in this paper will be considered in a comprehensive sense and will include the eustachian tube tympanic cavity, aditus, antrum, mastoid cells and chain of ossicles. In infancy there are some anatomical differences from that of the adult. At birth the mastoid process is undeveloped and contains only a single cell, the antrum which is superficial above and a little behind the external auditory meatus. Contrary to expectation on first thought, it is as large or even larger than the antrum of the adult. During the first year the process extends downward partly by its own growth, and partly by the action of the muscles attached to it. At about the third year it assumes the form of the adult process; the infantile eustachian tube, also is wider and shorter than that of the adult. A comprehensive conception of the mastoid process as an integral part of the middle ear. Its integrity is dependent largely on the healthy condition of this cavity, and since the latter has through the eustachian tube a direct connection with the naso-pharynx the mucus membrane of which continues without interruption to the tube, tympanum, antrum, mastoid cells, and is reflected over the ossicles in tympanum.

The relation being so intimate as to warrant the statement that one end of these correlated structures open into the naso-pharynx, the other into the mastoid cells. The mastoid process, therefore, consequently shares in pathological processes which have their origin in these connective tissue structures, and may involve

in regular order the naso-pharynx, the eustachian tube, the tympanic cavity, and the mastoid cells.

The middle ear is normally a sterile cavity. This immunity to infection is due to the ability of the mucus membrane to destroy micro-organisms and to nature providing a mechanical guard against the entrance of germs. The epithelium lining the tympano-pharyngeal tube is of the ciliated variety, and the cilia move toward the pharynx, thus obstructing the progress of invading bacteria.

Add to this physiologic process the force of an outpouring secretion from the irritated mucous membrane which naturally seeks exit by this channel and you have a fairly efficient protective power.

Pathological Considerations. Under normal conditions the only exposure of the middle ear to the atmosphere is through the eustachian tube, which is only open intermittently for the admission of air, but inasmuch as this tube terminates in the naso-pharynx a region more or less constantly inhabited by micro-organisms it may be said that the middle ear is continually exposed to bacterial invasions. However, in spite of this constant danger the middle ear enjoys a fair degree of immunity to suppuration. From what has been said it must not be supposed that all infections of the middle ear have their origin in the naso-pharynx, and travel by continuity of tissue. Irritating secretions may be conveyed from the naso-pharynx to the tympanic cavity by violently blowing the nose, sneezing, post nasal douching, politzeration, etc. There yet remains two other possible modes of infection. A perforating injury of the tympanic membrane as sometimes occurs in the unskillful manipulation of instruments in attempting the extraction of a foreign body from the external auditory canal, though this accident is rare compared with other causes. Hematogenous infection of the ear is a process about which we know little. Metastatic abscesses may form there as elsewhere, the blood also may convey the germs or toxins of certain systemic diseases like measles and scarlet fever. In measles the characteristic, inflammatory macules have been found on the tympanic mucous membrane at the same time that they appeared in the mouth or naso-pharynx and could not be due to extension over the surface of the mucous membrane from the naso-pharynx. In scarletina middle ear complications are more often a sequela to the disease.

Among the predisposing factors in suppurative otitis media to be considered are those from without as exposure to cold, cold water entering the external auditory canal during the bath, sudden

climatic changes, etc. From within that which lowers resistance, syphilis, tuberculosis, gout, etc. Often in this way the condition most favorable to the growth and activity of bacteria are obtained, namely lowered resistance of tissue cells, a suitable pabulum in a protected chamber heated to the proper temperature. It is a well known fact that there are present in the throat of all persons one or more micro-organisms capable of doing harm. The one most frequently found in this inactive state is the pneumococcus and it is worthy to note that this is the micro-organisms most frequently found in the pus of acute suppurative otitis media.

While the micro organisms found in the pus from middle ear disease are many, the ones most frequently found are the pneumococcus, streptococcus, staphylococcus, bacillus pneumoniae, diphtheriae B. tuberculosis B. influenza. If suppurative processes of the middle ear as sometimes supposed were confined only to the tympanic cavity, the disease would have no mortality and the prognosis would be as to the resulting impairment of hearing. But surrounded as the middle ear is by structures important to life an infective process within it is of grave importance.

When suppurative otitis media starts on a destructive tour it may invade the mastoid and by extension in one of several directions produce mastoiditis, lateral sinus thrombosis, extradural abscess meningitis, or cerebellar abscess. It may perforate the inner wall of the tympanum and produce a purulent labyrinthitis and from this it is possible to extend to the cerebral cavity by way of the external auditory canal. Again it may destroy the bony sheath of the facial nerve and cause a paralysis of the muscles of that side of the face or a systemic infection may result.

References:—Reik, Journal A. M. A., Volume XLIX.
 Tivnen, Journal of Ophthalmology and Oto-Laryngology, Vol. IV.
 Kopetzky. Annals, Otology, Rhinology and Laryngology, Vol. XIX.

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EXPERT OPINION EVIDENCE.

HON. FRANCIS M. BRADY.

Read before the Labette County Medical Society, Jan. 25, 1911.

Expert opinion evidence is testimony in the form of an opinion based upon facts proved or assumed, concerning a matter involving scientific or technical knowledge and all matters and subjects not within the experience of the ordinary witness.

The Supreme Court of this state has held that expert testimony is admissible in proof of any and all matters not clearly falling within

the range of common experience or observation. So you can readily see what a broad and practically unlimited field of study we enter when we take up this subject in a general way.

In the earliest period of the English law that which we now term expert opinion evidence was unknown. Indeed, evidence of any kind, produced according to modern rules, was not part of that primitive procedure. The jurors reached their conclusions for the most part from personal knowledge already possessed, and while they were never quite the same as mere witnesses, yet the information which they received from outside sources was at first not only inconsiderable, but was most informally acquired. Gradually however the practice of producing evidence in open court came into vogue, and as this increased the right to rely upon prior personal knowledge became correspondingly curtailed. The change in the method of producing evidence did not at once result in bringing the opinions of experts before the jurors. The opinions which were offered earliest appear to have been those of medical witnesses. But when this class of testimony was at first admitted it was received for the purpose of enlightening the court and if it reached the jury at all it did so through the medium of the courts charge. Medical experts have always constituted the most numerous class of experts, but there are many others such as architects, engineers, scientists, chemists, painters, millers, and so on through all of the myriad departments of human thought and activity.

Each person being called as a witness upon some subject of which he has special knowledge, experience, study or learning or training.

However you are more interested in the questions arising under the head of Medical Expert and opinion evidence and I will try to confine my remarks and suggestions to those things with which the Medical Expert most frequently meets and has to deal.

The earliest records we have of medical expert witnesses are found in the Roman and English law. And the earliest cases I have been able to find are English cases. One a Mayhem case in South Wark, England, in the year 1363 and another in 1865, a famous witchcraft case at Bury St. Edmunds where Dr. Thomas Browne, a person of great learning, after viewing the accused was asked to give his opinion as to what was the matter with the party and he was clearly of the opinion that the person was bewitched. And perhaps that question was no more foolish or difficult to answer than the hypothetical questions which some of you have met in your time.

It is not required that the expert testimony should be the most

perfect obtainable but the person testifying must have a knowledge not acquired by ordinary persons. The knowledge must be derived from experience or from study and direct mental application. On the whole it can hardly be said that there is any well defined standard by which to measure the qualifications of an expert and it is largely in the discretion of the trial judge.

The subject upon which Medical Experts are most frequently called to give their opinions are as to surgery, poisons, cause of deaths, abortion and miscarriage, injuries, effects of drugs, shamming injuries, insanity or mental conditions, and many others.

The varied phases and ever shifting intricacies of expert or opinion evidence is so confusing to the mind that one hesitates to enter into a discussion of the same lest he be lost amid the swarm of conflicting decisions of our various courts.

One subject however seems to have been well settled by our American courts and that is in reference to the fees and compensation of the expert opinion witness. This is important to the litigant and the public as well as the witness and is worthy of our consideration. Like the ordinary witness the expert may generally be compelled to testify, especially if he is already upon the stand, though he cannot be compelled to make special preparation for the giving of expert testimony.

Indeed the administration of justice might at times be sorely impeded if the courts were powerless to compel the assistance of experts and the question therefore at once arises as to the mode and measure of their compensation. So far as American Jurisdictions are concerned it is practically settled that the compensation of experts cannot be allowed and taxed as costs in the litigation except where the expert is appointed by the court and directed by it to do certain work or make certain reports etc. The state in a murder cases even is not liable for expert medical fees for testimony or examinations unless a contract was made therefor by someone having authority to bind the state therefor. So each party litigant must employ his own expert witnesses and neither party can be made to pay for the others expert witnesses in any event and the expert witnesses cannot collect compensation other than common witness fees unless he make special preparations or examinations at the request of a party litigant and has made an agreement with said party for pay for the same.

The law in England and Ireland is different. There the courts make ample allowances for the fees of expert opinion witnesses.

In Kansas an expert opinion witness cannot demand extra compensation for his testimony nor refuse to testify without being

paid. Neither can he be compelled to make any preparation in order to be able to give said testimony. There is one consolation for you however which I find in our Kansas decisions and that is our Supreme Court has decided that no person except a regularly practicing physician is a competent witness to testify what the services of a physician are worth in any case. An agreement between the litigant and the witness that the latter shall be paid a certain sum in case the suits results favorably to the former and if not he is to receive nothing is a void contract and cannot be enforced. And while it is lawful for you and highly proper to require a litigant to pay you a reasonable fee for preparation, investigations, examinations and time in such cases, if while on the witness stand opposing counsel see fit to ask you how much or what pay or fee you have received or are to receive for your services as an expert witness, you will have to answer the question and your answer is allowed to go to the jury and it is for them to say whether in their opinion said fee has to any extent influenced or warped your judgement or opinion as a witness in the case. A physician when summoned as a witness whether it be the purpose of the party having him subpoenaed to use him as an expert witness or not, subject, however, to the same excuses which an ordinary witness might have for failing to appear and answer.

And he may be put upon the witness stand and compelled to answer hypothetical questions and give expert testimony and in the absence of any agreement to the contrary he can only collect the ordinary witness fee and mileage therefor.

However the attorney who would adopt such a method of securing expert opinion testimony is either careless and reckless of his clients rights and of his own reputation as a good lawyer or he is driven to that extremity by reason of the poverty of his client and is simply seeking to make the best of whatever beneficial evidence he may be able to get in that way.

The shrewd lawyer with a client who has the means and a suit of sufficient magnitude as to justify the expense will, if it is medical testimony which he needs to win his case, go to the physicians and surgeons of the highest standing in the community where the case is to be tried and retain them with a proper fee for the purpose of their carefully considering all the matters concerning the subject of the expert testimony over which there will be a dispute in the trial.

The said medical experts will consult all of the leading medical authorities on the subject at hand and be prepared to give them together with their own views, judgments, and experiences, which

will sustain the theories and claims of their client and leave those which are against their position to be drawn out by opposing counsel or his experts on the same subject. Here is where the danger zone is reached in the giving and receiving of expert opinion evidence and for days a court and jury may be taken away from the real merits of a case and be compelled to listen to a jumble of hairsplitting technicalities which may become more important in the minds of the jury than the real questions and while we often witness such proceedings in courts it is the rare exception and not the rule. For Medical expert testimony is absolutely necessary that justice and right may prevail. Often it is the only means by which the truth can be ascertained and maintained. As medical knowledge grows and its erstwhile theories become absolute and proven settled facts the more valuable and necessary becomes its knowledge and opinions in the affairs of men for if matters arise in law which concern other sciences or faculties we commonly apply for the aid of that science or faculty which it concerns and must do so in order that questions may be decided in the light of and by the aid of the highest degree of knowledge and intelligence which mankind has acquired upon that particular subject.

Hence expert opinion evidence properly used and applied is an honorable and commendable thing in our law, as well as a necessity to uphold justice and vindicate the truth.

The medical expert witness should have the same conscientious scruples in stating what his opinions and judgments are as he would were he stating cold facts as to what was said or done on a particular occasion and lawyers find by experience that medical experts do come nearer adhering to and stating their honest opinions and judgments than the ordinary witness does to the truth in relating what they heard or saw on some occasion. And there are reasons for this:—The expert generally possesses a higher degree of intelligence than the non-expert witness and another is if he is sufficiently devoted to his profession to become a genuine expert he will regard the truths which that science has revealed to him as sacred and the more his study becomes a part of his life the more honest and earnest will be his opinions and judgments regardless of what other faults may have crept into his life. Hence we find medical experts the most reliable of any of the great class of experts and the most often appealed to by the courts for aid and information in determining important questions.

The subjects on which a physician may give expert opinion evidence are many. Diseases of all kinds, their cause, duration, effects, tendencies, curability, methods of treatment, effect of

drugs, health, injuries and wounds, electricity, surgery, fright effects, causes of death, insanity, mental conditions and in fact everything pertaining to their profession of which they have a special knowledge not usually and generally known and understood by persons outside the profession. So you see that what is expert opinion evidence for the medical expert is too broad to be dealt with here at this time except to say that it includes everything pertaining to the study and practice of medicine.

The rules of law in reference to the testimony of medical experts are so numerous that it would be impossible for me to give you any idea as to what they are in the time allotted to me. However here are a few of the rules laid down by our Kansas Courts.

An expert cannot give his opinion of the case under trial when the facts are controverted, but counsel must put to him hypothetical questions and ask his opinion upon them. Each attorney basing his hypothetical question upon what he claims the facts of the case to be, as shown by his evidence.

Before a person can testify as an expert it must be shown that he possesses a special knowledge on the subject in question.

A hypothetical question may be based upon any assumption of facts which the testimony tends to prove.

The hypothetical question must be based upon the truth of all of the evidence given in the case and must be framed so that the witness can intelligently answer the same and the answer of the witness must be based on the hypothesis stated and not upon a consideration of what might or might not happen under certain conditions.

Hypothetical questions should be based on the evidence and should include such matters of evidence that the witness may form a correct opinion. Medical experts in response to hypothetical questions are not required to answer with certainty, but may give their opinions as to the probable result of a given treatment or operation.

A physician and surgeon may give his opinion as an expert in a case involving the sanity of a party although he has not made dis-eases of the mind a special study.

A physician testifying as an expert should not be allowed to express an opinion as to the conditions of the patient formed in part upon the statements of third parties or upon what the family may have said of him but he should give his testimony based upon a personal examination and on the statements of the party himself, or upon a hypothetical question.

Where a medical witness has testified from his own knowledge and experience, to a matter within his province as an expert he

cannot be impeached by reading to the jury extracts from medical works. However, if he testify from knowledge gained from medical books, and he quote his authorities they may be brought in to impeach him if he misquote them.

My advice to you is that if you are called upon to appear as an expert witness in a case of importance, that you ascertain what will be the subject upon which your evidence will be required, what they expect to show, the probable extent of the investigations and examinations and research required of you. Then fix a fair fee for the same. Collect it in advance. Have your fee in your pocket before you venture an opinion. Then make your investigation or examination. Make your decisions with ease and caution. Remember that a fool can ask questions that it takes a wise man to answer. Be sure of your ground. Stick to what you believe to be right. Look the fool in the eye and answer his question in the light of your best judgment and if you do not happen to have a judgment on the question asked do not furnish one for the occasion in order to appear wise. Do not be afraid to say that you have no opinion or judgment on the point if you have not, and you will most surely acquit yourself from the witness stand with credit and justice to the subject on trial.

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A psoas abscess occasionally points in the outer part of the groin (i. e., close to the anterior spine of the ilium.) When there is no evident spinal deformity to suggest the diagnosis the swelling is apt to be mistaken for a growth.—American Journal of Surgery.

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In hydrocele, withdrawal of the fluid with the trocar is so barren of results that its attempt is not warranted at all. Toward the cure of the condition but two methods are available, either the injection of an irritating fluid, such as pure carbolic acid or iodine, or a radical open operation, leading to obliteration of the fluid forming membranes. The latter is to be recommended by reason of its certainty.—American Journal Dermatology.

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While the symptoms of kidney stone may appear plain and unmistakable, it is not wise to cut down on the organ until the presence of stone has been clearly proven by shadow-graphs. More than one surgeon has opened a kidney expecting to find a stone only to meet with disappointment, the symptoms determining such an operation having an entirely different pathological import.—American Journal Dermatology.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

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EDITORIAL

The ones who are always urging caution are usually the non-progressives.

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Optimism is the beautiful star and guiding light, keeping up the courage and lighting the pathway.

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With the already large number of clinicians daily increasing in numbers who are using salvarsan we may expect some "perfectly good" information within the next two or three years.

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It is an absolute necessity that all who are on the program for the annual meeting have a corrected type-written copy of their paper. This necessity can be readily understood when it is known that the printer has very little knowledge of medical terms and mistakes when they are numerous sometimes escape the editor's eye to his as well as the author's embarrassment.

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It is a notable fact that physicians as a class are poor business men. And it is not any wonder considering their opportunities. In the beginning the average physician has but few resources upon which to depend when his diploma is handed him, and he steps out into the world to make his start. Secondly, his business education has not at any time been considered, in fact he does not know the

first principle of making a charge or collecting money, much less the ability to invest it should he be fortunate enough to become possessor of a small sum. Thirdly, when a body of physicians hold a meeting the subject of business is never broached for the reason there is too much to be learned in a medical way. Fourthly, so called charity practice which largely is not charity but extortion of services cuts no small figure. Now a solution of a part of the difficulties might be, first, either a preliminary business course or one taught in connection with medical education. Second, a few papers and discussions directed along the line of expenses, expenditures and investments. Lastly, the employment of sufficient medical help by city and county authorities who are sufficiently paid to care for the poor and relieve the profession of this burden. Physicians as a class are wonderfully underpaid, and any honorable means looking to their betterment should appeal to all men professional or otherwise. We must eat.

The suit against Dr. Rae Smith, of Los Angeles, for \$50,000 for malpractice, was recently fought out in the courts, the verdict being for the defendant, Dr. Smith, the jury taking about ten minutes in coming to their decision. It is said to be one of the most remarkable suits in the history of American jurisprudence. It consumed nine days in the trial and the plaintiff, during the course of the suit, submitted to an operation in order to demonstrate that he did not have a tumor in his abdomen which some half-dozen or more physicians testified did exist and which two physicians testified did not exist. So confident was he in his own judgment that he insisted upon the operation; the tumor was found to be present, and the man who, previously, was fairly comfortable (with a colostomy, to be sure), has sacrificed his life. This is the first suit to be tried in court and defended by the Medical Society of the State of California under our Medical Defense plan, and the outcome is gratifying in the extreme. The attack upon Dr. Smith, whose treatment was absolutely correct, was exceedingly bitter and it is most unfortunate that the daily papers, which gave considerable space to the melodramatic incidents of the trial, should not have given as much space to the final decision of the jury and the vindication of Dr. Smith.—California State Journal of Medicine.

This unusual case is a striking example of how far patients sometimes will go to defeat justice. In this particular instance the patient must have had the courage of his convictions or else was willing to take a chance with his life for mercenary gain. It further emphasizes the necessity of co-operation on the part of the

members of the State Society whose moral influence and backing would oft times be the means of preventing malpractice suits as well as defending them after they are brought.

Some good sound advice is given in an article on "The Business Career of the Physician and Some Suggestions as to Safe Investments," by Dr. Lambert Ott in the Pennsylvania Medical Journal for February. A few of his "do's" and "don't's" impersonating his own experiences are as follows:

Do not look for a high rate of interest and a sound investment conjointly; they are seldom safe companions. Do not buy or invest in mining stock unless you are on the ground to inform yourself of all that transpires. Do not buy industrial stock because your friends advise you; usually the first purchasers lose their all and the subsequent purchaser in the reorganization succeeds. Do not lend a patient money, for you will lose both patient and loan. Do not consort with stock brokers, for woe betide the physician and his earning who learns to know such a person. The doctor and his savings are soon parted. Do not invest in any promotion in which you are given a directorship or an official position to induce you to advance money. Nine-tenths of them fail. Do not invest in anything where you have not a voice, or must permit others to handle your money. Do not listen to propositions where you are offered much for little, or something for nothing, as there is usually concealed a trick which may involve you further in expense to save what little you have left. Do not always act upon your own advice, but think hard and long and consult your wife, and above all consult a good lawyer and pay him well for his advice; he will often save you much trouble and money. An investment in mining stock is a beautiful gamble, but I have never heard of a physician making anything out of one. The promoter acquires a claim and sells you and me shares of preferred stock with two or three of common stock as a bonus. He capitalizes for 200,000 shares of preferred stock and 1,000,000 common. The innocent purchaser pays for the prospecting whilst holding only a small share of stock and the promoter, who controls three-fourths of this stock which does not cost him a cent, spends your money liberally and lives princely; should ore be discovered you will hear of it but never benefit by it as the majority of stock holders control the mine and money, and any output, large or small, he salaries into his pocket, sending you each year or oftener a glowing and promising prospectus to stimulate your hope and feed you on that sweet morsel known as pleasing anticipation. A successful doctor and gold mine owner

of Colorado happened in my office just at the time I had invested in a gold mine with a number of prominent Philadelphians, the high character of the men prompting me to advance my money, of which I told him. He at once said you have thrown your money away; good mines are not bartered to eastern people at a nominal sum per share and should one at any time have purchased a small amount of stock in a valuable mine he will not hear of it until he has parted with his shares in disgust, and then the rich-bearing ore is exposed. The doctor advised that to mine successfully one should go to the works, examine what comes out of the ground, and watch every element of the undertaking and he would soon be able to conclude whether to buy more stock or sell what he has, provided it is marketable and his conscience permits him to unload a worthless article on an unsuspecting public. Beware of the dulcet tones of the mine broker and when he sends you a midnight telegram calling your attention to a decided mining investment, do not bite and you will save money. Do not be misled by a glowing prospectus in which striking tabulations appear and grand assets are rounded off with large numbers adding unnatural and phenomenal profits to their balances, which only exist on paper and are purposely made to catch the unwary. I once invested in a large ice-making plant on receiving such a prospectus and much of its promises could have been fulfilled had the inside men been honest; but they stole the earning and plant and I lost my money with two subsequent assessments. Then after having learned what not to buy the question arises what to buy or how to invest money. I would name them in what I consider the order of their importance: Real estate; first mortgages; municipal, state or government bonds; and building and loan associations. The late Anthony Drexel once made the remark that real estate is one of the safest investments. This statement, now several years old, holds good to-day, conditions not having materially changed since his time. There are many families in Philadelphia made up solely of one or more women whose principal income depends entirely upon real-estate holdings. There is, it is true, a gradual reduction in their income as properties age but there is always something for them to live on. Small residence properties are the class of houses to buy, or central business houses, the latter having the possibility of enhancing in value while residence property is more likely to decrease except when located in a neighborhood in which there is a trend of business. Finally let me advise you to vary your investments; as the trite saying is, do not carry all your eggs in one basket. Buy a little of a good bank stock, a few shares of good railroad stock, some small

houses, now and then a business house, also bonds when a bargain, thereby scattering your investments so that a panic or hard times coming will not cripple you, as it might were your money out in one line.

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The attention of the members of the Society is again called to the report of the Committee for Medical Defense which will be acted upon at the next meeting in May. Upon order from the Council it is again published so that all may familiarize themselves with its contents and come prepared to discuss it intelligently. The question of a medical defense is a paramount one and all ready several state societies have adopted this means of giving protection to its members. It is certainly good reasoning to adopt the old slogan "in time of peace, prepare for war."

REPORT OF THE COMMITTEE FOR MEDICAL DEFENSE.

The Executive Board Kansas State Medical Society:

GENTLEMEN:—We your committee appointed at a regular meeting held in Emporia, Kansas, May 7th, 1909, to frame an amendment to the Constitution and By-Laws providing for a medical Defense Department for our State Society do present to you this expression as being fully in accordance with our best judgment in the matter. We hope the same will meet your approval and that the same will be properly brought before the State Society that it may be acted upon at the next regular meeting at Topeka next May.

Yours very truly,

W. L. HOPPER,
J. D. WALTHALL,
J. E. SAWTELL, Committee.

CONSTITUTION AND BY-LAWS, KANSAS STATE MEDICAL SOCIETY.

AMENDMENT NO. 1.

An amendment creating and providing for the maintenance of a Medical Defense Department in the Kansas State Medical Society. Defining the duties of the officers, the eligibility of members for defense, the obligation of the board and the creating and maintaining of a fund for the same.

CONSTITUTION AND BY-LAWS OF THE MEDICAL DEFENSE DEPARTMENT OF THE KANSAS STATE MEDICAL SOCIETY.

1. The name of this Department shall be the Medico-Legal

Department of the Kansas State Medical Society, and shall cooperate therewith as herein provided.

2. The object of this Department of the State Medical Society shall be the defense of its members against unjust suits for malpractice.

3. The Committee of Public Policy and Legislation shall constitute the Medico-Legal Board, all of whom shall serve without pay. The term of service of each member except the President and Secretary shall be three years, provided the service shall be grouped into three divisions with terms expiring one, two and three years respectively from the time of the adoption of this amendment. It shall be the duty of the members of this committee, severally or collectively, to investigate all claims of malpractice against members, to adjust such claims, take full charge of all cases they see fit to defend, and prosecute it to the end and pay all court costs. But they shall not pay or obligate the Society to pay a judgment against any member. They shall effect such organization as they see fit, and adopt rules for their own guidance and for the guidance of members of the State Society in Medico-Legal matters, provided, the same does not conflict with this amendment. They shall be empowered to contract with such agents (attorney or other) as they may deem necessary. They shall have charge of the Medical Defense Fund which fund shall be secured as follows: The Treasurer shall set aside out of the general fund of the Society two thousand (\$2,000.00) dollars the first year and twenty-five cents per member per year thereafter. It shall be kept in the treasury of the Society, and shall be subject to warrants signed co-jointly by the Chairman and the Secretary of the Medical Defense Board.

4. It shall be the duty of the Secretary to act as such and have no vote in the board.

5. The assistance for defense as herein provided shall be only for such members of the Kansas State Medical Society as are in good standing, and who shall have paid the initiation fee and yearly dues. Neglect to pay the dues at the proper time shall forfeit all claim on this Society for any protection which it can afford. No doctor shall be defended for any action unless he was a member of the Society and a resident of Kansas during the time when the alleged malpractice was committed, when the case was threatened or begun, and who was a member in good standing in this Society and shall comply with the regulations herein and hereafter lawfully made.

6. It shall be the duty of any member of this Society threatened with suit for malpractice to immediately notify the President

of the County Society, who shall at once send him an application blank for names of witnesses, etc., and on receipt of this blank properly filled in, the President shall immediately call his County Committee and investigate.

7. The President of the County Society in which the defendant resides, the Councillor of the Kansas State Medical Society from the District, and a doctor (who must be a member of the State Society) chosen by the defendant, shall form a County Committee which shall investigate the case of malpractice against the defendant. If for any reason the President or Councillor cannot act, the Secretary and Senior Delegate of the County Society shall act in his or their place in order. The Committee shall examine the defendant and his witnesses, if necessary, under oath. If the Committee agree that it is a case to be defended, it shall so report to the Chairman of the Defense Board of this Society. If this County Committee shall decide that it is not a case to be defended the defendant doctor may appeal direct to the Defense Board of the Kansas State Medical Society and it shall, in all cases have the final decision whether the case is to be defended or not. The findings of these committees, if unfavorable, are to be communicated to the defendant alone

8. The only liability of the Medical Protective Board will be for the fee of the consultant lawyer, a reasonable fixed fee to be agreed in advance for the local lawyer selected by the Board, and the legally taxed court costs, all other expenses of the case to be borne by the defendant. Provided, however, that if the income for this department of the Society for any one year has been exhausted by or appropriated for contracts, in defense of members, the Board shall have the right of apportioning dues to the expense of defense to be borne by it upon all cases subsequently arising until such dues shall again be sufficient to pay as before indicated; and provided further that no officer or member of this Society shall be responsible individually for the whole or any part, or for assessment upon any of the obligations which this Society or its officers for it, are hereby authorized to assume.

9. It shall be the duty of every member of this Society to aid the Society in every legitimate manner.

10. It shall be the duty of the Defense Board to follow the case through any and all courts until a correct judgment be obtained if in its judgment such a course should be judicious. **In no case will the Society compromise.**

BY-LAWS.

1. A certificate of membership, showing the payment of dues

to the State Society for the current year, signed by the President of the Kansas State Medical Society and countersigned by the Secretary, shall be evidence of recognition by this board.

2. Any member who fails to pay his dues by the first of April shall be deemed delinquent, and shall forfeit his membership, but may be reinstated at any time upon payment of annual dues, provided that no case is threatened or pending against him. Provided further that he shall not be entitled to have this Society defend any suit for an act of malpractice alleged to have been committed during the time he was not a member.

3. The Defense Board shall hold its annual meeting on the day preceding the annual session of the Kansas State Medical Society, and meetings may be held at any other time upon the call of the Chairman or any two members of the Board, two days written notice of the meeting being given each member.

4. The Defense Board shall, at its annual meeting, elect one of its members as Chairman for the ensuing year, who shall enter at once upon his duties prescribed by the Constitution, be such as custom and parliamentary usages require.

5. A vacancy in the office of Chairman or other member of the Board may at a meeting of the remaining Defense Board called for that purpose be filled by that Board until its next annual meeting.

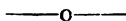
6. It shall be the duty of the Defense Board to employ a lawyer or firm of lawyers as the General Counsel of this Society and to fix his or their compensation, and it shall be the duty of the General Counsel upon request of the Defense Board to give legal advice in all matters pertaining to their official duties and to take charge and control the defense of all malpractice suits against members of this Society who have taken the steps necessary to entitle them to have the defense of this Society.

7. Each member of the State Society who has complied with all its rules and regulations lawfully adopted shall be entitled, upon application duly made, to have this Board to defend not only every original suit against him for malpractice which has been fully determined by the proper authority to be a cause for defense, but any claim for damages against him in any courts for alleged malpractice, whether the recovery be sought by an original action or by counter claim, cross action or otherwise, provided proper application for defense has been made and it has been determined by the proper authority that the claim is one which ought to be defended. In no event, however, is the defendant herein contemplated to cover criminal prosecutions of suits for assaults,

criminal abortion or other criminal act. The member shall be further entitled, after proper notice to the Defense Committee, to the advice and assistance of the Committee and the General Counsel in preventing threatened unjust suits for malpractice..

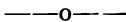
8. A member shall have no authority to employ an attorney to defend any action for malpractice brought against him, it being the duty of the Defense Board to make such employment after conference with the General Counsel and defendant to be the attorney to be employed. Nor shall a member have authority to bind this Society for the payment of money for any purpose or any other respect.

9. It shall be the duty of any member applying for malpractice defense to immediately send to the Chairman of the Defense Board upon receipt thereof, any process of court or evidence relating to the suit or threatened suit to be defended, and to keep the Defense Board fully informed as to everything having a bearing on his defense.



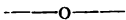
SOCIETY NOTES.

The annual banquet of the Wyandotte County Medical Society was held at the Grund Hotel, Kansas City, Kansas, February 14th., Dr. J. E. Sawtell was toastmaster. Drs. Martha M. Bacon, Hugh Wilkinson, E. A. Reeves, responded to toasts.



The Western Kansas and Decatur-Norton County Medical Societies held a joint session at Norton, Kansas, February 16.

Following is the program: Broncho-Pneumonia, Dr. Norris, Treatment of Non-Specific Anal and Rectal Fistulæ, Dr. Knox, The Present Status of the Ehrlich-Hata Treatment of Syphilis, Dr. Carmichael, Early Diagnosis of Pulmonary Tuberculosis, Dr. Ward, Personal Aspect of Pneumonia, Dr. Gulick. Report of meeting of Councillors, Dr. Kenney. In the evening a banquet was tendered the visitors by the physicians of Norton.



The Northeast Kansas Medical Society held its Annual meeting at Topeka, February 9. The following officers were elected; president, Dr. M. T. Sudler, Lawrence; vice-president, Dr. E. J. Blair, Lawrence; Secretary and Treasurer, Dr. L. V. Sams, Topeka. The following papers were read: Diagnosis and Treatment of Ringworm, Dr. Leon Matassarini, Lawrence; Intestinal Obstruction, Dr. R. C. Lowman, Kansas City; The Detection of Disease of the Kidney and Urinary Apparatus, Dr. E. S. Petti-

john, Topeka; Amenorrhœa, Dr. J. C. Shaw, Holton; Hypothermia with Report of Cases, Dr. H. L. Chambers, Lawrence; Some Fractures of the Forearm, Dr. W. D. Storrs Topeka; The Shawnee County Society entertained the Society with a dinner at the Throop. The next meeting October 12, will be held in Kansas City.

NEWS NOTES

Dr. S. Weir Mitchell, of Philadelphia, celebrated his eighty-first birthday, February 15.

Dr. Hugh Wilkinson of Kansas City, Kansas, visited the mayo's clinic at Rochester during March.

Dr. Owen G. Hutchinson, has recently been appointed physician of Wichita and Sedgewick County.

Dr. J. E. Sawtell attended a meeting of the Council on medical education and legislation of the A. M. A., of which he is a member.

Dr. F. E. Casburn, formerly of La Cygne, Kansas has located at Wichita. He has sold his practice at La Cygne to Dr. A. J. May of New Cambria.

California is once more to the front—her state Board of Health has notified local Boards of Health that beginning January 1, 1911, Syphilis and Gonorrhea shall be reportable diseases, like the others of an infectious nature.—Utah Medical Journal.

The next meeting of the Mississippi Valley Medical Association has been announced for Tuesday, Wednesday and Thursday, October 17, 18 and 19, 1911. The orators for this meeting will be Dr. Joseph D. Bryant, of New York, in Surgery, and Dr. J. C. Wilson, of Philadelphia, in Medicine. An important change in the program next year will be the adoption of the plan of making it for the most part an invitation program. The number of papers will be limited, and the topics to be discussed will be carefully chosen. The men selected to read the papers on the chosen subjects will be men who are known to be especially fit for discussing these subjects. Dr. A. D. Holmes will be chairman of the Medical Section and Dr. Barnet will be chairman of the Surgical Section.

MISCELLANEOUS

Correction.—On account of misinformation the Journal printed the name of Dr. G. W. Jones, of Lawrence, as president-elect of the Douglas county Medical Society. Dr. Jones was elected delegate to the State Society and Dr. James Naismith president of the Douglas County Society.

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A correspondent writes to the Journal in most emphatic terms deploring the election of Judge Works to the United States Senate. He objects because Works is an eddyite, and it appears as though there were a movement on foot to place a number of eddyite followers in our legislative halls and thus influence legislation. He also objects because Works is a "reader" in a "Church of Christ Scientist"—and that use of the word "Scientist," well, a red rag is more pacifying to a slightly nervous bull. But our correspondent forgets. Works is only a figment of his own imagination; to that figment there is no Senate, it is only an idea; he can not do anything about legislation, because there is no such thing as legislation, that too being a mere idea; to think it is "error". It is quite useless to get worked up over this passing delusion; you cannot fight un-reason with logic; you can neither legislate nor club common sense into anyone. These people do not know what they are saying; they cannot argue; they cannot discuss anything logically; they can only repeat, parrot-like, the meaningless words that some other person has jumbled together. Cultivate a sense of humor and let the delusion wear itself out. We can have faith without "Works."—Editorial, California State Journal of Medicine

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A Physician's Fate.—Some time ago, a Dr. Franz in an Austrian village reported a case of typhoid fever and had the patient removed to a hospital for infectious diseases. Unluckily, just at that time maneuvers of the army were to take place in this district, and the village of Reidan, where the above-mentioned case occurred, was to have been the headquarters. On account of the typhoid patient this plan was altered and the villagers lost the prospect of pleasure and profit due to the temporary occupation. The grocers and inn-keepers of the village therefore instituted a vertible boycott against the physician. Their influence caused him to lose his appointment as district physician and his practice with the population. Finally his life, his family and his house were exposed to the greatest danger. The people wanted

to starve him and his family out for having done his duty. When the infuriated peasants failed to drive the doctor away, actions for damages were brought against him. The excitement was too much for the poor doctor; he suddenly died at the age of 36 from paralysis of the heart. But now the organization of medical practitioners has cooperated and the village is under boycott. It can get no doctor until full provision has been made by the local authorities for the family of the outraged doctor. [Furthermore the government has turned its attention to the matter, so that the guilty will receive punishment. In order to prevent a recurrence of similar events, strict regulations will be made in all cases of appointments of country physicians, in which the duties of the doctors towards public health will be clearly defined. The incident shows what a doctor can expect if the population is of a low standard of enlightenment.—Journal A. M. A.

Club Practice Degrading.—The physicians of Laporte, Ind., are to be congratulated on the stand they have taken. It is to be hoped that their opposition to this vicious lodge-practice business will be so thoroughly successful as effectually to put a stop to any further efforts along that line in Laporte. The experience of physicians in that city should serve as a warning to the members of the profession, and especially to county societies in every part of the country. There is no possible argument by which such prostitution of the profession can be justified, either from the standpoint of the physician or of the patient. The only person who can possibly profit by such an arrangement is the middleman, who, if he can reduce some shortsighted physician to a state of peonage and farm out his "professional services" (God save the mark) for \$2 a year to gullible members of the laity, who may be over-brought by their bargain-counter proclivities, may realize a handsome income. To any one else such an arrangement can only result in disappointment. It is to be hoped that in every community in which effort is made to secure the services of physicians on such ridiculous terms, members of the local profession will follow the example of the Laporte physicians and settle the matter promptly and finally.—Journal A. M. A.

The Nobel Prizes.—As our readers know, the Nobel Prizes fund awards five prizes each year averaging from \$38,000 to \$40,000 each. Since 1900 nearly two millions have been thus distributed to leaders in physics, literature, promotion of peace, medicine and chemistry. List of the scientific recipients forms an

International Hall of Fame, the chemists thus honored being Van't Hoff, E. Fischer, Arrhenius, Ramsay, Bæyer, Moissan, E. Buchner, E. Ruhterford, W. Ostwald, and the 1910 recipient, O. Wallach, professor of chemistry at the university of Gottingen. The recipients of the medicine prize have been von Behring, D. Ross, Finsen, Pawlow, Koch, Cajal and Golgi, Laveran, Ehrlich professor of physiology at the University of Heidelberg. The last physics prize was awarded to van der Weels, professor of physics at the university of Amsterdam, the last literature prize to P. J. L. Heyse of Germany, and the peace prize to the International Peace Bureau at Berne. The balance between the various countries has been maintained with remarkable impartiality but the majority of the prizes have gone to Germany. Only two have crossed the Atlantic, the peace prize given to President Roosevelt and the physics prize in 1907 to Professor Michelsen of the University of Chicago. It is a question whether the designs of the founder of the prize fund has been realized to date; the awards have gone to men who were already resting on their laurels and the prizes have not served to foster new research to any extent. The committee in charge of the awards pays no attention to personal applications for prizes; the applications to be considered must come from scientific societies, institutions or other organized authority. It is possible that the greater preponderance of prize-winners in certain nationalities is because their institutions and societies have taken greater pains to present the claims of candidates in their respective nations.—Journal A. M. A.

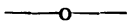
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What a Smile Will Do.—More than once a smile has won a stiff fight. More than once a smile has carried a man on to success, when other essentials seemingly necessary to success were lacking. Nothing is cheaper than a smile. Few things attract us so much as a smile. A smile will often succeed where storm and bluster fail.

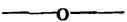
You know how you avoid the man who always looks glum and hates to smile. If a shopkeeper a block beyond always has a smile and a pleasant smile for you, that man will get your business. Have you not often wondered why some physician without a great deal of professional knowledge has a better practice than his better qualified neighbor? Ten to one that successful man always has a smile and a pleasant way with him. That same and pleasant way do a lot of good in the sick room. In many cases they are worth a great deal more than medicine.

Smile, but put a kind feeling behind it. We do not want the

smile only; we want the feeling the smile expresses. If you are feeling a little blue, smile and try to feel it. You will, too. In making your rounds, smile at folks and have a pleasant word for them. They will like that smile and those few pleasant words, even though they do employ your competitor. Carry sunshine with you, not gloom.—St. Louis Medical Review.



A Municipal Drink Cure for Chicago is planned by Mayor Busse, Chief of Police Steward and Superintendent Whitman, of the House of Correction. It will be established in the House of Correction. A note or a sentence from any judge of the municipal courts will give an *entree* to any man who desires to be cured. Investigation of records indicates that the troubles of more than seventy-five per cent. of the prisoners are due to drink.—Exchange.



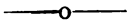
DOPE FOR DOCTORS.

Some dig for gold, and some seek for precious stones; but it is a blind surgeon who cannot find a pot of yellow metal at the foot of the vermiform appendix.

A specialist for the eye, and another for each corner of the anatomy, and big checks for all, but the people sigh for the "good old family doctor."

The sick man longeth for a doctor, and hailleth his coming with joy, but the convalescent is haunted by shadows of the bill to come, and crieth "Enough."

The Chinaman crieth "no cashee no washee," and the banker requireth heavy collateral; but the physician is expected to go right along with his work, and he does.—Chas. Irvin Junkin, in Judge.



ODE TO THE GRIP.

With humble apologies to the shades of Edgar Allan Poe, by the writer, Elmer E. Haynes, M. D., Lewis, Kansas.

I.

Tho' you're not a bit particular
Still you dodge disease pericular
Most of all the ill tusicular
Known by common folks as grip.
When your head is hot and aching,
Every limb with chills is shaking,
And each bloomin' bone is breaking,
Then you know you've got the grip.

And you wonder what's the reason
That your legs and feet are freezin'
While your flues are hot and wheezin'
Like the funnels of a ship.
Oh it's grip, grip, grip,
Oh it's naughty, snaughty grip
Your poor nose
How it flows;
How your pocket kerchiefs rip
With the grip, grip, grip, grip
Grip, Grip, Grip—
The detrimental, penitential, pestilential grip!

II.

Oh it's zip!
And the grip has got you in it's nip
And your nose is hot and itchy
And the water starts to drip
And you snort
And between the fits of sneezin'
You declare your back is freezin'
And you cuss the winter season
And you cuss the bloody grip.
You cavort
And you sneeze, sneeze, sneeze,
And your nose you gently squeeze,
And you d———— the northern season
That abets the beastly grip.
For the sunny south you're pinin'
Where the sun is always shinin'
So you soak your hide in quinine
While you plan a southern trip:
Yes you swear
And declare
That you'll take a Cuban trip
To shake the grip.
Oh! the grip, lovely grip!
Oh! the sneezin', snortin' grip!
Oh how your heads are aching
And how your noses drip!

With the grip, grip, grip, grip,
Grip, grip, grip;
The head-exploding, nose-eroding, lung-corroding grip.

Obituary.

Joseph Clements, M. D., Kansas City, (Mo.) Medical College, 1891; and later clinical instructor on diseases of children in his alma mater; for twenty years a clergyman; a writer on psychology and metaphysics; died at his home in Wichita, Kansas, January 31, from valvular heart disease, aged 70.

William M. Rich, (license, Kansas, 1901); for twenty-six years an eclectic practitioner of Clements; died at his home, January 27, from influenza, aged 81.

Case Reports.

Cerebrospinal Meningitis.—S. R. Benedict, Athens, Ga., (Journal A. M. A., February 4), reports a case of cerebrospinal meningitis in which he aspirated one and a half ounces of cloudy cerebral fluid from the right cerebral ventricle and injected 20 c. c. of antimeningitis serum, closing the wound without drainage. Marked temporary improvements followed. Four days later, however, the patient became markedly worse and died with a temperature of 104.6 F. Necropsy, performed one hour after death, showed almost normal conditions in the right ventricle. In the other, however, the disease was apparently unaffected. In another similar case, he says, he will not overlook the other ventricle.

Two Appendices in One Person.—Reported by W. G. Young, M. D., Grand Rapids, Mich., in the A. M. A. Journal. On Nov. 7, 1910, I was called out of town to see Miss C. D., aged 21. She had been suffering intense abdominal pain, accompanied with vomiting, for three days. The abdomen was distended and tense; pulse 140; temperature 101. A diagnosis of acute suppurative appendicitis with peritonitis was made, and an operation advised. On opening the abdomen I found pus in the peritoneal cavity with no walling off; there were two appendices containing pus; one was ruptured. One appendix measured 3 by $\frac{3}{8}$ inches, the other one $3\frac{1}{2}$ by $\frac{3}{8}$ inches. Their bases were $1\frac{1}{4}$ inches apart, and each had a meso-appendix. Drainage was instituted, the patient placed in the Fowler position and continuous rectal saline by the drop method

was employed for five days. The patient made a slow recovery; at present is able to walk around the room.

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CLINICAL NOTES

Salvarsan Technic.—A long list of "don't's" in the use of salvarsan are given by J. F. Schamberg and N. Ginsburg, Philadelphia (Journal A. M. A., February 4). These slightly abbreviated are as follows: 1. Don't use salvarsan in mild carditis, advanced tabes and paresis, syphilis of nervous centers, in grave kidney disease, in cachexia or marked debility, unless due to syphilis, in aneurism, optic neuritis or in persons with lesions (such as gastric ulcer) where increased blood-pressure may produce hemorrhage. 2. Don't use intravenous injections of salvarsan until you have fully qualified yourself to do so. 3. In the preparation for the intravenous injections do not use common salt solution or undistilled water, but have all materials chemically pure and sterile; otherwise you may not have a clear solution. 4. Don't under any circumstances inject a solution which is not perfectly clear. 5. Don't use a solution any more alkaline than is absolutely necessary to secure a clear solution. 6. Don't inject the salvarsan into the vein without previously running in physiologic salt solution. If the needle is not in the vein you will infiltrate the surrounding tissues and cause unnecessary pain and inflammation. 7. Don't infuse the solution into the vein too rapidly. It is best to have a needle of such capacity as will take eight minutes to introduce 200 c. c. of fluid. With the gravity apparatus the rapidity of inflow can be readily governed. 8. Don't infuse a cold solution, but use one about blood-heat. 9. Don't use glass pearls in the mixing jar, as small parts may chip off and cause embolism. 10. Don't use a routine dosage of the drug, but gauge it according to the weight of the patient and the condition to be treated. 11. Don't employ intravenous injection in your office or in dispensary. The patient should be in bed in the hospital and be carefully observed for not less than three days. 12. Don't persist in intravenous injection if the patient shows signs of collapse during administration, but stop at once.

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The Diagnosis of Duodenal Ulcer.—(Deutsch, med. Wochenschr.) says that unless we accept the view of Moynihan, according to whom every case of "hunger pain" is one of duodenal ulcer, the differentiation between this disease and ordinary hyperacidity is often difficult. Duodenal ulcer may exist in the ab-

sence of tenderness on palpation, vomiting, gastric stagnation, and occult blood in stool or stomach contents. Mendel has discovered another sign which he has found very useful. If we percuss the epigastrium directly, best with a hammer, a small area of tenderness will be found, —usually not larger than a fifty cent piece and rigidly circumscribed,—over which direct percussion elicits pain. This will be observed in both gastric and duodenal ulcers, even when palpation reveals no tenderness. The extent of this area and its location will correspond to the size and the site of the ulcer. In duodenal ulcer, the area of tenderness on direct percussion will lie just to the right of the linea alba, a little nearer to the naval than to the costal margin. As the ulcer heals, the area of tenderness can be observed to decrease in extent. In one case of duodenal ulcer, recently observed by us, this sign could not be elicited.

Therapeutically, Mendel favors rest in bed and diet rather than operation.—Charlotte Medical Journal.

Fatigue as a Symptom.—Chronic fatigue is the most obvious symptom in neurasthenia minor. It is true fatigue rather than simple weakness, as is shown by the facts that action is readily excited, but takes an abnormally long time to reach its maximum; that effort cannot be sustained evenly, but shows marked oscillations, and that there is slight incoordination. It is presumably due to the continual production of fatigue toxins. It effects both the mental powers and the physical, probably including the functioning of the viscera.—P. C. C. Smith in the Practitioner.

Symptoms of Acute Otitis Media.—Blum reports that further experiences with 200 cases have confirmed his statement in regard to the early diagnosis of otitis media in children by local pressure. On placing the finger behind the angle of the jaw in the groove formed by the inferior maxillary bone and the anterior border of the sterno-mastoid of the affected side, and pressing upward and inward toward the auditory canal, decided evidence of pain is elicited. He says this symptom is constant in otitis media, and is of special diagnostic value in infants.—Kentucky Medical Journal.

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INJURIES TO THE ABDOMINAL VISCERA, PRODUCED BY INDIRECT VIOLENCE—A PLEA FOR EARLY OPERATION.

G. M. GRAY, M. D., Kansas City, Kansas.

Read before the Wyandotte County Medical Society, March 14, 1911.

In this class of injuries, we see cases in which the life of the individual, as a rule, is threatened from hemorrhage, as in cases where the liver or spleen may be the seat of rupture. In other cases, constituting a majority of this class of injuries, the danger of death is from general peritonitis. In all, the only hope for the person so injured is early abdominal incision with repair of visceral injuries. The death rate in this class of cases is too high, and it is my opinion that this high death rate might be materially decreased if early operation were resorted to more frequently. It is, as a rule, the general practitioner in medicine who first sees and treats these cases; and frequently the surgeon is not called upon for twenty-four, thirty-six or more hours, after the receipt of the injury. General peritonitis is now present, and the condition of the patient is grave, indeed, with no hopes of recovery without operation, and only slight hopes if abdominal section is done with repair of visceral injury and drainage of peritoneal cavity. Many of these cases die without operation, and the exact mortality among this class of injuries is not definitely determinable; but it is much higher than it would be if they were all subjected to exploratory laparotomy within the first six hours after the receipt of the injury. Rupture of the intestines or stomach produced by contusion to the abdominal wall, or by violence applied to some other portion of the body, is a much more serious injury, than perforation from gunshot wounds or stab wounds, in which the hollow viscus are opened, for this reason,

the force that ruptures the intestine or stomach forcibly expels the contents into the peritoneal cavity, and it is immediately widely distributed over the peritoneal surface, increasing the shock and the dangers of general peritonitis, even though the abdomen is opened early and injuries repaired. To illustrate this condition, I will report the following case, that came under my care at St. Margaret's Hospital, August 2, 1910: Name, N. G., aged 38 years, Austrian; occupation, laborer; employee of the Armour Packing Company. History of injury: About 8 a. m., of Aug. 2, the patient accidentally stepped into an open elevator shaft and fell a distance of about thirty feet, striking upon the buttocks, producing some contusion of left buttocks, but absolutely no indication of any contusion to the abdominal parietes. He immediately complained of severe abdominal pain, located in the epigastrium, and vomited. When admitted to the hospital, two hours after the receipt of the injury, he was suffering severe shock; pulse was rapid and feeble, surface of body cold; was very restless; marked rigidity of all the abdominal muscles. He was immediately removed to the operating room, where the abdomen was opened under a general anesthetic. This was about three hours after the receipt of the injury. A large rupture had occurred in the ileum, about two feet from the ilio cæcal junction. I could easily insert the end of my finger in the rupture, which was of the nature of a blow-out, and evidently had emptied the contents of the intestines into the peritoneal cavity, for no part of the peritoneal cavity seemed free from contamination, by the fecal contents. This was in marked contrast to the condition I have frequently found after a gunshot wound and knife wound of the intestine, where very little of the intestinal contents is found far removed from the point of rupture, and as a rule the amount is small.

In this case, the contents of the intestines had been carried to every part of the peritoneal cavity below the stomach. Both loins and the pelvic cavity containing large amounts of fecal contents, and the whole peritoneal cavity was markedly congested. The opening in the ileum was closed with linen suture; the peritoneal cavity wiped out with moist gauze sponges, and drainage by a rubber tube extending into both loins and the pelvic cavity inserted. Our patient died of general peritonitis, about twenty-four hours after the operation, having never recovered from the shock of the injury.

Case No. 2; D. S., aged 16; a well developed young man; was admitted to St. Margaret's Hospital May 28, suffering from

general peritonitis. Gave the following history of the injury: Was working about the engines at an ice plant in Kansas City, Kansas, about 9 a. m., May 27, when the reverse lever of the engine struck him a sharp blow on the abdomen. There was a slight ecchymosis about two inches to the right of the umbilicus. He was immediately attacked with severe abdominal pain, and vomited soon after the receipt of the injury, suffering immediately from severe shock. He was removed to his home, about one mile from the plant, in a conveyance, he sitting upright on the seat, where his physician was called to attend him. I was called in consultation about twelve hours after the receipt of the injury, and found him with general abdominal tenderness, all the abdominal muscles markedly rigid, so that the abdomen was like a board. His temperature was 104 and his pulse 140. He had vomited several times during the day, had great thirst, and had morphine several times for the relief of pain.

I advised immediate operation, and that he be removed to the hospital for this purpose; but his parents did not agree to this until the next morning, when he was removed to St. Margaret's Hospital, where the abdomen was opened by incision in right semilunar line; this was twenty-four hours after the receipt of the injury. At this time, his temperature was 103 and pulse 140; symptoms of general peritonitis unmistakable; a large, ragged rupture was found in the ileum, close to the ilio cæcal junction; pelvis filled with fluid and general infection of peritoneal cavity well marked. The opening in the intestine was closed, abdomen drained, and the patient placed in Fowler's position, and frequent enemas of normal salt solution administered per rectum but he never rallied from the shock, and died about twenty-six hours after the operation. This is the history of very many of these cases that come under my notice, and it would seem that if operation could be obtained earlier, better results might be looked for.

Case No. 3; H. B., slender boy, 15 years of age; admitted to St. Margaret's Hospital, October 13, 1909, with following history: In crossing the track in Missouri Pacific Railway yards, he attempted to pass between two stationary freight cars, when cars came together, pinching the left side of abdomen. He disengaged himself from the cars and walked out about twenty feet from them, where he fell to the ground, and was removed to the hospital by ambulance, arriving at the hospital about one and one-half hours after the receipt of the injury; condition: he was in severe shock, very restless, surface cold and blanched. Not much pain. He was immediately removed to the operating room, where the ab-

domen was opened by incision in the left semilunar line; abdomen was filled with fluid blood; the source of hemorrhage was found to be from a ragged rupture of the spleen; this was controlled by passing cat-gut sutures through the spleen, thus coaptating the torn surfaces; blood was removed from the abdomen by a moist gauze sponge, and abdomen closed without drainage; patient put to bed and rectal enemas of normal salt solution about eight ounces in amount was given every two hours, or twenty-four hours, after which stomach feeding was resorted to. He made a somewhat slow, but perfect, recovery, and was discharged from the hospital well on November 30, about six weeks after the receipt of the injury.

I could report other cases of intestinal rupture occurring as a result of violence applied to the abdomen, by kicks from horses and from men; all of which have gone through this period of waiting from twenty-four to seventy-two hours before operation was suggested; and to that stage when all hope for the individual's recovery had passed, before operation was advised.

In the September issue of the *Annals of Surgery*, there is an article by Dr. Harvey S. Stone, under the title of "Intestinal Lesions Produced by Blunt Force, with report of four cases in which the time of operation ranged from thirty-six to one hundred and one hours after the receipt of the injury. He had three recoveries in this series, which I believe is far above the average in cases operated upon as late as these. After going over the symptoms presented in cases of abdominal contusion, with rupture of some of the contained viscus, and cases of severe contusion without visceral rupture, he concludes that shock, pain and vomiting varied so much in different individuals during the early hours, and that many cases can only be decided by exploration of the abdomen. In fact, this is the opinion of all recent writers on the subject. He says that it is urged, and with reason, that the additional assault of the anæsthetic and exploration on a person already suffering with shock—who may not have visceral rupture, is decidedly less to be feared than the chance of letting a ruptured gut go until the symptoms are so outspoken as to make the nature of the injury absolutely unmistakable. While the symptoms presented in the cases of rupture of spleen or liver may vary somewhat from those presented in cases of hollow viscus, yet the two lesions are so closely related in their cause and treatment that they may be considered as belonging to the same class of cases and requiring the same treatment. The chances for recovery without early operation are practically nil; with operation, the chances

vary inversely with a period intervening between the receipt of the injury and the time of operation. Of the general symptoms to attract attention, shock with rigidity of the abdominal muscles is the most important. I know that some writers regard shock as of small importance in determining the facts as to whether rupture has occurred or not, contending that the shock is a large measure due to the insult to the vagus to the splanchnic or solar plexus. I think arguments of this kind have a tendency to justify the physician for waiting for symptoms, which will only be manifested when it is too late to do anything for the relief of the individual; and there can be but little danger added to the case by opening the abdomen and making sure of the condition, even though no visceral rupture should be found.

THE ART AND THE SCIENCE IN THE PRACTICE OF MEDICINE.

W. A. CARR, M. D., Junction City, Kansas.

Read before the Golden Belt Medical Society, Oct. 6, 1910.

During the three years of my membership in the Golden Belt Medical Society, I have been impressed by the abundance of excellent material presented relative to the present and future of the profession, and to the entire absence of everything historical or retrospective in nature; so that I trust you will pardon my small digression from the topics ordinarily presented.

This constant accentuation of the present, however, is by no means to be disparaged, for the tasks and problems of the present, with their deep personal and professional importance are also the problems of the future, and that which is not pertinent to our own careers and the every day demands of our patrons is worthy of our deepest thought and greatest endeavor; yet, in meeting demands, there is a strong tendency to overlook the broadening influence of a thoroughly conversant knowledge of the past, which serves as a compass to locate this profession with reference to the other elements of our social system, and which is contributing so largely to the ultimate ends of human destiny. He who discerns the future most clearly usually derives his inspiration from the historical aspects of the subject in hand. Hence, if we wish to locate our profession with reference to other members of our social organism, and ourselves with reference to our own particular profession, we have first of all to make a mental survey of the whole texture from the remotest times to the present, and to take frequent inventories of our intellectual stock. Then only,

may we make a forecast with any assurance that we may be right.

With reference to medicine, a survey of the whole situation from the beginnings in antiquity, through the present and on into the future reveals the startling circumstances that the medical doctor is the only man fool enough, or wise enough it may be, to devote his life and talents assiduously to the ultimate extermination of his own business.

Most great things have small beginnings, and if light ever came out of darkness and order out of chaos, then the truth of this aphorism has been vindicated in the great structure we call modern, for its beginnings were not only small, but the circumstances were ignominious, and one must seek for them in the mist of remotest history, not as full-fledged sciences ready for the hand of the skillful applicator, but as doubtful side issues whose exponents were the priests, witches and barbers. In the most advanced and cultivated of ancient nations only was the practice of the healing art followed exclusively by a few of the educated men, and their minds, generally, were controlled by the religious fanaticism of their surroundings, while their actions were dominated by innumerable superstitions. If a man were sick, it must be some direct dispensation of the gods because of some religious infraction. If he had an osteomyelitis or other abscess, the signs must be propitious. It made little difference whether the waiting ruined the bone or not.

In all the centuries preceeding, and as well in many succeeding the beginning of the christian era, the man of religion was not only schoolmaster and priest, but in many countries, doctor and undertaker as well. The natural function of parturition was relegated to and presided over by the old women, while surgery, for the most part was left to the man with sharp knives, the barber, who still displays the bloody stripe of his ancient craft.

While viewing the work of past centuries today, through the panoramic pages of history, it is easy to trace a few of the great principles, which have worked out and united the fabric of modern civilization, and not the least of these is the underlying tendency to segregate and classify the knowledge on the various subjects, which classifications constitute the sciences from which our predecessors began constructing the intellectual equipment of the modern M. D. A casual glance only is necessary to discern the law of natural selection, which brought all the contributing sciences into one array constituting the scientific side of medicine, whose widening vistas are receiving more and more the devotion of the votaries of medicine. Indeed, the scientific trend of today is so

strong that we rush headlong after further facts which we can tabulate, forgetting that the practice of medicine is dual in nature and that a successful career does not depend entirely upon the amount of encyclopediac data with which one can cram his cerebrum. The doctors of the past lived and practiced in a time when science was almost nil and all treatment was empiric, yet their practices flourished and they could not be stigmatized as quacks. Those men depended on their skill of presentation and application. At no time has the general practitioner been more polished and diplomatic than during the reign of Louis XIV. yet all southern Europe was scourged by malaria until this self-same Louis purchased the secret of the source of quinine from a South American priest and published the same broadcast.

One is compelled, therefore, to look upon medical practice not as the mere application of remedial agents, but as a skillful combination of science and art in the broadest sense of the latter term.

In order to accomplish the greatest amount for himself and his patrons, the doctor must acquire and cultivate, where he does not inherit, those manners and graces of person which compel the respect and confidence of those among whom he lives and works. Indeed, he must be a man of great versatility as Plutarch so well said of Alcibiades, in the following words: "He captivated and won over everybody by his conformity to Spartan habits. People who saw him wearing his hair close cut, bathing in cold water, eating coarse meal, and dining on black broth, doubted, or rather could not believe, that he ever had a cook in his house, had ever seen a perfumer, or had worn a mantle of Milesian purple. For he had as it was observed, this peculiar talent and artifice for gaining men's affections, that he could at once comply with and really embrace and enter into their habits and ways of life. At Sparta he was devoted to athletic exercises, was frugal and reserved, in Ionia, luxurious, gay, and indolent; in Thrace, always drinking; in Thessaly, ever on horseback; and when he lived with Tisaphernes, the Persian satrap, he exceeded the Persians themselves in magnificence and pomp. Not that his natural disposition changed so easily, nor that his real character was so very variable, but, whenever he was sensible that, by pursuing his own inclinations he might give offence to those with whom he had occasion to converse, he transformed himself into any shape, and adopted any fashion, which he observed to be most agreeable to them."

No chapter in the history of civilization is fuller of edifica-

tion and interest than the biographies of the great diplomats, and it is worth any man's time, not only as an added intellectual asset, but in actual cash to read and read again the lives of some of those men. Few graduates of medicine fail to acquire a satisfactory practice because of an actual ignorance of the principles involved, but many turn in despair to other occupations, in order to earn a livelihood, because they lack those qualities, which inspire confidence, and induce their one time patients to come back again.

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RHEUMATISM.

J. DILLON, M. D., Eureka, Kansas.

Read before the Kansas Medical Society, Oct. 6, 1910.

Since "Malaria" has become unfashionable, with the exception of "Grip", there is no term in the whole nosognomy of human ills that is more satisfying to the lay mind than "Rheumatism." That word tells the whole story. But ask all the doctors in the world what "Rheumatism" is and no one knows.

Edison says that he does not know what electricity is; yet he and others have learned enough about it to harness it up in ways to revolutionize the industries of man and to send it with the speed of light bearing messages around the world. So a few minutes of inquiry spent by us into this unknown may start somebody thinking and the time be not wholly lost.

A partial roll-call of diseases that have been, and are still being, grouped, not only by the laity but by physicians under the name of rheumatism will show the heterogeneity of pain in joints muscles and bones. Besides affections not mentioned this list would include arthritis from syphilitic, gonorrheal, tubercular or septic (staphylococcic) origin, old sprains and contusions, flat-foot, enchondroma, osteoma, myalgia, bursitis, synovitis, periostitis, osteitis, osteo-arthritis, osteo-periostitis, osteomyelitis, osteo-malacia, gout, arthritis deformans, chronic rheumatism and rheumatic fever.

As we all readily recognize, as each of these terms is pronounced, there is not one of them till we reach the last three that can have any just claim to the name of rheumatism. Yet they have all been so classed—sometimes by the ignorant, sometimes through carelessness, and sometimes the very elect have blundered. I have neither time nor space here to take each up individually and severally and speak of its diagnostic features, but shall con-

tent myself by calling attention to a few points that have been observed about arthritis deformans, acute and chronic rheumatism.

The fact that chronic rheumatism is usually a sequel of the acute form would indicate that they both have a like cause or causes. The fact that a not extensive perusal of the literature of arthritis deformans would reveal more than a hundred proposed remedies is proof that we are still groping in the dark for relief. The fact that patients with chronic articular rheumatism are greatly benefited by hot baths, sweats and Bier's hyperemia, while those with arthritis deformans are only made worse thereby; together with the fact that in the former the final results are found within the capsule of the joint, with little if any extra-articular involvement, while in arthritis deformans the local pathologic changes are almost wholly confined to the cartilages and peri-articular tissues, would seem to prove these affections are as different and distinct maladies as two diseased joints, one of which is syphilitic and the other tubercular.

That rarely, if ever, has any kind of microbe been found in the diseased tissues of a true, uncomplicated arthritis deformans joint would seem to prove that it is not directly a microbic disease; but the frequency with which its mutilating progress has been arrested by the removal of a long-standing case of piles, endometritis or a chronically diseased appendix, etc., should prompt every physician having this disease to treat, to make a careful search for some such source of chronic intoxication which is perverting the nutrition through some chemical or other action upon the joint structures. Ochsner reports the case of a woman of 47 who had been progressively growing worse for three years. After frequent examinations he found tenderness at McBurney's point. Further inquiry developed that she had suffered a severe attack of appendicitis 19 years before. A long, (7in.) curled and universally adherent appendix, having its distal end filled with fecal matter, was removed, the joint irritation slowly subsided and perfect health ultimately followed.

As to the etiology of true rheumatism several theories or guesses have been advanced. First, that it depends upon a morbid material produced within the system by defective processes of assimilation—the lactic acid or metabolic theory. Second, the nervous theory, alleging that "either the nerve centers are primarily affected by cold and the local lesions are really trophic in character or the primary nervous disturbances lead to errors in metabolism and the accumulation of lactic acid in the system."

Third, the germ theory: "that the arthritis is due to a specific microbe." While micrococci have been found in the blood, and various organisms detected in the inflammatory products of the disease, no specific rheumatism germ has ever been found, nor is it probable that there is such a thing.

A very suggestive paper (which I have only seen in abstract) appeared in the "London Lancet, December 4, 1909, under the title "Local Sepsis as a Factor in Rheumatism and Gout." These authors studied forty-one cases. In thirty-three of these cases the septic focus appears to have been pyorrhea alveolaris—this term being expanded to include any form of oral sepsis, as superficial inflammations around the teeth in ill-kept mouths, pockets between the gums and teeth, osteitis of the bony sockets in well-kept mouths, acute or chronic cases where true pus can be squeezed from around the necks of affected teeth, dry osteitis with absorption and receding gums, and any combination of the above. Actual pus, however, is not invariably present. While in adults the mouth is found to be much in the majority, as a source of infection, it is by no means contended that it is the sole source. It is sometimes found in the nasal cavity. In children adenoids and septic tonsils were found to be the prevailing foci of infection. Not one single case of rheumatism or gout was found without some accompanying local sepsis. To the question "Is chronic sepsis always present in true rheumatism? The answer is "Yes." May chronic sepsis exist without rheumatism? The answer again is "Yes."

As to internal medicine the main reliance is still in the salicylates; but if you find and remove soon enough the local sepsis it will help amazingly.

If this paper should serve to stimulate a search for septic foci in arthritis deformans and rheumatism it will have accomplished its purpose.

GUNSHOT WOUNDS OF THE ABDOMEN, WITH REPORT OF CASE.

H. L. SNYDER, M. D., Winfield, Kansas.

Read before the Southwest Medical Association.

The classical description of gunshot wounds of the abdomen defines two kinds, penetrating and non-penetrating. Non-penetrating wounds, under modern treatment, unless complicated by infection or unless a viscus is injured by the impact of the bullet

on the abdominal wall, are of little consequence. Before the days of antiseptic surgery such wounds received in war had a mortality of about eight per cent. The reports of the Spanish-American and Phillipine campaigns record sixty-four such injuries and no deaths.

Penetrating wounds of the abdomen and wounds of the head and spine are equally dangerous, and are the most serious injuries received from gunshot. Infection in these wounds is the most frequent cause of fatal result. The statistics of the wars from the Crimean-English to the Phillipine Insurrection give 50 per cent of the wounds of the abdomen as penetrating. The mortality varies from 92.5 per cent in the Crimean War to 64.4 per cent in the Phillipine Insurrection. Since the invention of the modern steel jacketed bullet the per cent of penetrating wounds has increased, due to the greater velocity, penetration and lessened deflection. These wounds are small, clean cut and less apt to be infected than those made by the old style bullets.

The wounds received in civil life are commonly made by the old style lead bullet. This bullet makes a much larger wound which may be ragged and crooked in its course and the danger of infection is greater. The civilian is not as good a type to withstand a gunshot injury as the soldier wounded in war. The soldier is a young adult in good physical condition, and free from disease. The reverse is apt to be true of the man in civil life. The amount of damage done by a penetrating gunshot wound varies from simple penetration to the most extensive laceration of the contained organs.

Nicholas Senn in his "Practical Surgery" writes of an experiment he made on a cadaver using a thirty eight calibre rifle at a distance of thirty feet. The body of the cadaver was placed in an erect position against a wall and sixteen shots were fired in an antero-posterior direction, each one passing through the body. Examination disclosed the fact that four of the bullets traversed the abdominal cavity without injuring any of the large blood vessels or other organs; each of these four bullets entered the abdomen at or a little above the umbilicus. All the bullets entering the abdomen below the umbilical level caused intestinal perforations. Senn also reports a number of cases that he himself saw which were shot in the region of the umbilicus and recovered without operation. These experiments and observations of Senn's are valuable both from the standpoint of diagnosis and prognosis.

Prognosis. The simple penetrating wound injury of the

viscera are the least dangerous; wounds of the solid organs, liver, spleen and kidneys, are the second most favorable; wounds of the large intestine and the urinary bladder are next in order, while injury of the small intestine is the most serious of all. "The Medical and Surgical History of the War of the Rebellion", states that not a single case of injury of the small intestine recovered, the fifty-nine recoveries reported being from wounds of the large intestine.' Little has been written of gunshot wounds of the pancreas except that some of these have been reported in which the pancreas protruded from the wound and was cut off, with recovery of patient. Acute pancreatitis with suppuration, gangrene and fat necrosis may follow a gunshot wound of this organ.

Symptoms. There are no absolute symptoms by which we can tell the extent of injury immediately after the receipt of wound. Shock is present but may not be in proportion to the severity of of the injury. Pain is variable. Pallor is present in all cases and becomes extreme with hemorrhage. The pulse is slow and not characteristic except in hemorrhage. Vomiting may or may not occur and is as apt to be present in non-penetrating as penetrating. There are no physical signs which are definite until there has been marked extravasation of either blood or intestinal contents. Senn regarded the insuflation of pure hydrogen gas per rectum of value in the demonstration of perforations of the intestines. Later authorities grant that this may be useful after the abdomen is opened. All authorities agree that these wounds should never be probed. The amount of damage inflicted varies with the size of the bullet, the velocity, the angle of which it strikes, the mode of impact and the condition of the viscera. Hollow organs suffer most when full. Oblique wounds allow free escape of intestinal contents. The greatest damage is done when a missile of high velocity wounds a viscus which is filled with fluid, producing an explosive effect. I observed in one case the wound of entrance in the bladder, which had not been emptied for over three hours, was large enough to admit the distal phalanx of my thumb, while the wound of exit was clean cut and of the same size as the original wound in the skin. Deformed bullets make large ragged wounds. The large intestine and the bladder may each be injured extra-peritoneally, which, Makins states, are more dangerous than intra-peritoneal wounds because of septicæmia.

Treatment. All writers agree that the treatment of intra-abdominal wounds is operative when the operation can be done aseptically and the condition of the patient will warrant it. They

agree also that in military surgery, the treatment is ordinarily non-operative, for the reason that they can not always do an aseptic operation and usually see the patient too late. When possible to operate it should be done at the very earliest moment after injury, waiting only for recovery from the initial shock. The incision should usually be median and free. Hemorrhage, if of any consequence, should be controlled first; then the small intestine should be carefully and rapidly examined with a minimum amount of handling, beginning at the ileo-cecal valve, each loop, if not injured, should be returned to the abdomen as soon as examined. The large intestine should be examined likewise beginning at the cecum. Wounds on the convex side of the bowel can be closed by suture if not too extensive; those on the mesenteric side will usually require resection on account of the blood supply being cut off from the bowel. When a double resection is required and the intervening portion of gut is not more than three feet, it is better to resect it making only one enterorrhaphy. The suture material should be catgut, fine linen or silk. Clean cut wounds of the solid viscera, uninfected, heal quickly; hemorrhage is the greatest danger. Wounds of the liver without hemorrhage require simply drainage, with hemorrhage should be sutured or plugged with gauze. Injuries of the gall bladder may necessitate, either suture and drainage, or cholecystectomy and drainage. Wounds of the spleen are treated in the same way as those of the liver, except hemorrhage may be so severe that splenectomy is required. Wounds of the kidneys may require simply the drainage, suture and drainage, or nephrectomy.

The organ most frequently injured in the pelvis is the urinary bladder. It may be wounded intra-peritoneally, extra-peritoneally, or both. Extensive damage may be done if wounded when full. The symptoms of most importance in these wounds are hemorrhage and an empty bladder. The treatment should be operative, the openings being closed with two rows of sutures. If the bladder is so extensively damaged that control is lost, a catheter should be introduced and fastened in position to drain. However, if the patient is able to empty the bladder within two or three hours after suturing, I believe it the better practice not to use the catheter. Drainage should be used in all cases, in which there is extravasation of the contents of the abdominal viscera. If it is necessary to move a patient with an abdominal wound, his position, whether sitting or reclining, should be governed by the location of the wound. Those wounds in the upper half of the abdomen should be moved lying down; those in the lower

half, unless too severely shocked, should be kept in a sitting position, or partly so, for by so doing you may prevent extensive infection in the peritoneal cavity.

The authorities to whom I am indebted on this subject are Nicholas Senn, Major William C. Borden and General Robert M. O'Reilly. The unusual features of the case, which I shall now report, caused me to choose this subject.

Case. M. T., male, age 33, laborer, was admitted to the hospital 9:45 p. m., June 5, 1909. While going home with his family, patient was held up, and, after being robbed, was shot three times. One bullet passed through the thenar eminence of the right hand, one through the left leg, just grazing the tibia an inch and one half below the knee joint, and the third through the abdomen. This bullet entered about two inches above the pubic bone in the right border of the left rectus muscle, ranged downward and to the right and passed out through the right sacro-sciatic notch. He stated that, after being shot, he walked a block and pushed a baby in a baby cab, then got in a cab and rode to the hospital sitting up. He was shocked, pale, suffering severely, pulse 72, and temperature $97\frac{3}{4}$. In order to limit infection to the lower part of the abdomen we kept him sitting up until taken to the operating room. The abdomen was opened in the median line and found to be full of blood mixed with intestinal contents. The small intestine had eight perforations and two abrasions causing the bowels to turn black. The hemorrhage came principally from a wound of the bladder, the bullet having passed entirely through it. The injured intestine was wrapped in hot towels and the bladder wounds were repaired first in order to control the hemorrhage. There was an intraperitoneal wound an inch wide by an inch and three quarters long and an extraperitoneal wound the size of a thirty-eight calibre bullet, the latter causing most of the hemorrhage. The tract of the bullet leading from the bladder out through the sacro-sciatic notch and through the buttock was wiped out with moist bichloride gauze and a cigarette drain was inserted up to the wound in the bladder. The extraperitoneal wound was closed by two rows of sutures inserted from within the bladder. Tanned catgut was used, each stitch catching all the coats of the bladder, the first row approximating the edges. The next row of sutures was put in as continuous mattress suture so that the outer walls were approximated external to the wound. The intraperitoneal wound was so extensive that it was necessary to trim away some lacerated tissue and to take out a small V-shaped piece at each end to

make a good approximation. The first row of sutures was continuous and included all the coats of the bladder. The second was also continuous, firmly catching the muscle. A catheter was not inserted for the urethral opening was not injured and it was deemed wiser to risk emptying the bladder voluntarily than to put in a drainage catheter. It was necessary to resect thirty-two inches of the small intestine; about ten inches of healthy bowel was sacrificed because of the destruction of the blood supply, in a portion about two inches in length, by an oblique abrasion. The lowest injury was about fourteen inches from the ileo-cecal valve. The lumen was restored with an end to end anastomosis by suture. Two rows were put in, one sero-muscular of linen, the other a catgut suture which was put in as a continuous Connell. One half of the linen suture was put in first, by starting at the mesenteric borders and running it as a sero-muscular stitch to the convex surface of the bowel; this suture was wrapped in a clean piece of gauze and tucked under the intestinal clamp. The continuous Connell was put in, in the usual manner, by entering the needle in the lumen of the bowel at the mesenteric attachment and passing it through the bowel wall and through the serosa of one side of the triangular space. It was then carried over and entered through the serosa of the opposite cut end, at the same relative point, and carried through all of the coats of the wall into the lumen; then was passed back, through the same cut end, repeating the process in the opposite direction, catching the opposite leaf of the serosa of the triangular space and entering the lumen of the bowel one eighth of an inch from point of origin and then tied. This secured a perfect serous approximation at this point. Without cutting the suture, the remainder of the union was made in the same manner as the first stitch, ending finally in the lumen of the bowel where it began. The suture was tied leaving the knot in the lumen of the bowel. The linen suture was then continued from the convex surface back to the original point of entry where it was tied and the ends cut short. The mesentery was folded and sutured by a continuous catgut suture which ended next the bowel at the site of the enterorrhaphy. This controlled the hemorrhage and drew the fold of the mesentery into a firm bunch next the bowel. The intestine was then turned over and three or four interrupted stitches put in to close the gap in the fold and to prevent any possibility of hernia into it. The bowel was carefully wiped and the abdomen carefully sponged with gauze wet with normal salt solution; the bowels were returned to the abdomen and a quantity of normal salt solution poured

in. The omentum was drawn well down, a large cigarettedrain carried to the bottom of the pelvis and the abdomen closed down to the drain. The patient was placed in bed in a half reclining position. He rallied quickly and six hours later, had a pulse of 96, temperature $99\frac{3}{4}$. Six hours later he vomited, six hours later, or eighteen hours after operation, his pulse was 118, temperature 103 with delirium. He began vomiting fecal matter and contined it for eighteen hours when the bowels moved. Six hours after the operation an enema was given and a quantity of hardened fecal masses were passed; for when injured his bowels had not moved for twelve hours and he had eaten a hearty supper two hours before. When the fecal vomiting began a half grain of calomel was given every half hour until in all five grains were taken, this was followed by a saline and later by a glycerine enema, producing a good bowel movement. The delirium disappeared, the temperature was normal, pulse 78 on the third day, No laxative was required after this, but on two occasions it was necessary to give something to check the bowels. The drainage was free, serous at first, later pus. The wound healed in four weeks. I wish to call particular attention to the bladder; it apparently never leaked and was emptied voluntarily within three hours after the operation. He continued to void the urine about every half hour for the next three days, after which the interval gradually lengthened and when discharged, at the end of the fifth week, would retain it four hours without discomfort. He did not require the use of a catheter, at any time, and never lost control of the bladder. It was irrigated once only and that at the end of the second week. He went to work in less than ninety days and has experienced no discomfort since.

TONSIL OPERATIONS.

J. E. SAWTELL, M. D., Kansas City, Kansas.

Read before the Northeast Kansas Medical Society, Oct. 27, 1910.

Extirpation of tonsils was practiced at a very early period, the first clear history having been given by Celsus about the year 10 A. D. That writer speaks of the operation as though it were an ordinary and insignificant procedure. He says: "Tonsils which remain indurated after inflammation, if covered by a thin membrane, should be loosened by working the fingers around them, and torn out. When this is not practicable, they should be seized by a hook and excised with a scalpel."

We see from the above history that the unsurgical procedure using the finger as an instrument for removing the tonsil, which is still in vogue by a few at the present time, had its birth many centuries before the era of scientific surgery.

The next writer to give an account of this operation was Aetius, A. D. 490, who speaks of it with much greater trepidity. He says: "That portion which protrudes, i. e., about half of the entire gland, may be removed. Those who extirpate the entire tonsil remove at the same time structures which are perfectly healthy, and in this way give rise to serious hemorrhage."

In A. D. 750, Paulus Aegineta gives a clear history of excision of the tonsils. He does not approve of operating upon them inflamed. His technic is given very much the same as that of a modern tonsillotomy.

Albucasis, A. D. 1120, describes the operation very much the same as the above author but is more cautious and dreads hemorrhage.

For several centuries subsequent to the above period, the operation seems to have fallen into disuse, and to have become obsolete and traditionary.

Ambroise Pare, in 1509, advised tracheotomy for serious enlargement of the tonsils, as did also his followers. In 1637 the operation was again revived for a short time and was performed either by ligation or cautery. The surgical treatise of Heister in 1683, which was the most popular text-book of its time has the following: "This operation is not only too severe and cruel but also too difficult in the performance, to come to the practice of the moderns, because of the obscure situation of the tonsils." It remained for Caque, in 1757, to prove unqualifiedly that the great dread of hemorrhage, which had existed so long, was without foundation. From this date down to the present time, excision of tonsils has been a recognized surgical procedure.

It would consume too much time to enter into a description of the various devices used for removing tonsils, as well as the different methods of technic that prevailed at different times up to 1827 when the tonsillotome was devised by Dr. Physic, of Philadelphia. It was then that tonsillotomy became the recognized operation by an overwhelming majority of the most distinguished specialists and writers of the day.

By the use of this instrument or some of its modifications, this operation continued to be universal until some eight or nine years ago, when tonsillectomy began to be practiced by a few. Since, then the operation has continued to grow in popularity,

until today it is the operation selected by the vast majority of the leading laryngologists of this country.

By tonsillectomy is meant the removal of the tonsil with its investing capsule. The tonsil is situated in the sinus tonsillar and has for its anterior boundary the glosso-palatine fold, and for its posterior boundary the palato-pharyngeal fold, commonly known as the anterior and posterior pillars. Its external boundary is the superior constrictor muscle.

The plica tonsillar, which should disappear before the second year, is often observed in both children and adults. It is an abnormal remnant of embryonic tissue and when found it is a continuation of the border of the anterior pillar, forming a band or fold over the upper portion of the tonsil. Sometimes the anterior surface of the tonsil is covered to a greater or less extent with this membrane. When this is true it is not an easy matter to outline the edge of the anterior pillar.

The blood supply of the tonsil is derived from the following arteries given in the order of greatest importance:

(A)—The tonsillar artery is given off from the external maxillary, near the external carotid, and passes upward and forward under the jaw into the loose, fatty tissue of the pharyngo-maxillary space. Opposite the middle portion of the tonsil the artery gives off a branch which passes to the bucco-pharyngeal fascia, which covers externally the superior constrictor muscle. Here the artery divides into a superior and an inferior.

The tonsillar artery being normally the largest to supply the tonsil, and having its origin from the external maxillary, close to the external carotid, is most likely to be the source of troublesome hemorrhage when it occurs.

(B)—The ascending pharyngeal, a small branch of the external carotid, gives off two branches as it passes upward. One opposite the tonsil, a small branch, is called the ramus tonsillaris; another higher up, somewhat above the tonsil and which supplies the upper portion, is called the descending palatine. It is this artery, next to the tonsillar, that may cause troublesome hemorrhage, and which occurs in the upper portions of the sinus tonsillar.

(C)—The ascending palatine, another branch given off from the external maxillary, passes up to the outer side of the pharynx and gives off a branch to supply the tonsil, which anastomoses with the branches of the descending palatine and those of the tonsillar artery.

(D)—The dorsalis linguæ is a small branch given off from the

lingual artery at the dorsum, of the tongue. It supplies the mucus membrane of the tonsil, pillars and the epiglottis. Other points of arterial hemorrhage are usually limited to the anterior and posterior pillars. However, hemorrhage from this source is not likely to occur unless the pillars have been unnecessarily injured during the course of the operation.

Venous hemorrhage is not usually severe, but when it does occur, it is likely to be found in the inferior portion of the sinus tonsillaris where the tonsillar venous plexus is located.

The bucco-pharyngeal fascia, which covers the superior constrictor muscle externally, forms the inner boundary of the pharyngo-maxillary space, in the posterior part of which are found the large vessels. These relations are of interest as bearing on the carotid arteries, which are distant outward from the lateral periphery of the tonsil about two thirds of an inch, and posteriorly, about one inch. From this it will be observed that the large vessels are never in danger of being wounded in the performance of tonsillectomy.

The conditions of the faucial tonsil which call for operative interference may be divided into two general classes.:

- (1) Hypertrophy causing interference with respiration.
- (2) Diseased conditions causing local or constitutional infection.

Hypertrophied tonsils that are not otherwise diseased but are of sufficient size to interfere with respiration present rather a rare condition. However, when there is a simple hypertrophy to this extent, extirpation is the only remedy.

The second classification includes by far the greater number of conditions demanding surgical attention. The most common of all these is recurring attacks of tonsillitis, of whatever severity or character. Recurring attacks of peritonsillar abscess, which condition is common only in the adult, is an indication for a complete tonsillectomy. After repeated attacks of peritonsillar abscess there is sometimes a fistulous tract extending down behind the capsule of the tonsil and unless the tonsillectomy is complete no relief will be afforded from further attacks.

An interesting case of this kind occurred recently in a patient, for whom I had performed a tonsillotomy several years ago. Recurrence of attacks of peritonsillar abscess continued. After the advent of tonsillectomy I urged him to allow me to perform this operation to which he finally consented about one year ago. A month or so after this operation, I was astonished to see him re-

turn with another attack, which seemed to extend somewhat higher up into the soft palate than formerly. The pus was evacuated, which gave relief, and he was requested to return in two or three weeks after all inflammation had dissappeared. A careful investigation revealed a fistulous tract extending from the upper portion of the sinus tonsillaris, up between the muscular layers of the soft palate, for the distance of a full inch. I dissected out the fistulous tract under local anæsthesia, which was a difficult task in a hypersensitive throat. Upon further exploration, at the upper part of the excision quite a pocket was discovered, extending horizontally in the direction of the median line, filled with hard caseous masses, which had been previously carried there during suppurative attacks. This cavity was curetted and kept open for a few days; then it was allowed to heal, and no further trouble has occurred.

Impairment of hearing, in both children and adults, is often due to diseased tonsils. The impaired hearing in children, from whom adenoids have been removed, and in whom submerged tonsils are allowed to remain, will not receive the accustomed relief that obtains when both are removed. There is a chain of lymphatics which extends up the lateral walls of the pharynx from the faucial tonsils to the eustachian tubes, and through this channel infections from the tonsils may set up a tubal inflammation and hypertrophy, which in turn interferes with proper ventilation of the middle ear.

Permanent relief from chronic follicular pharyngitis, where there are diseased tonsils, can only be expected when the tonsils are extirpated.

When tuberculous glands about the neck are associated with diseased tonsils, a tonsillectomy is of as great importance as removing the tuberculous glands.

It is unnecessary to refer to the records of the laryngologist for proof that attacks of rheumatism often follow acute inflammations of diseased tonsils. The statistics of companies and societies that pay sick benefits can furnish conclusive evidence of this fact.

So much has been written in recent years about the tonsils as portals of infection that I have ventured to call attention to only a few of the most important conditions which call for extirpation.

One of the most prominent surgeons in this country has said that the tonsil is of greater clinical importance than the appendix; that it causes more suffering and more deaths. If this

is true, and there is abundant evidence to support the statement, the tonsil is worthy of more consideration than is usually given to it.

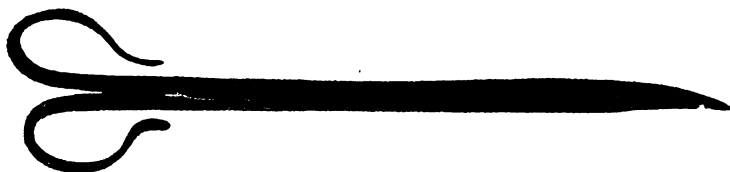
In describing the operation for complete extirpation of the tonsil, or tonsillectomy, as it is commonly known, no attempt will be made to give the various methods in use by different operators. I will describe only the technic employed in my own work, a part of which is original and a part I have selected from other laryngologists.

Anæsthesia may be local or general. Local anæsthesia, as a rule, is employed in patients over twelve or fourteen years of age. In children under this age it is better to do the work under general anæsthesia. After the child is anæsthetized the table is placed slightly in the Trendelenburg position. Instead of lowering the head over the end of the table, it is better to place a small roll or pad under the neck and shoulders so the chin will be slightly elevated by the head dropping back.

When local anæsthesia is employed the patient sits in an upright position. A five per cent solution of cocaine is sprayed over the pillars and pharynx by the use of a tube that throws a very fine nebulous spray. This is continued until a slight numbness is produced which very materially lessens the amount of gagging during the further steps of the operation.

When both tonsils are to be removed, one third of a grain of cocaine and one, one hundred and fiftieth of a grain of adrenalin is dissolved in a dram of distilled water. The tonsil is then seized with the forceps and drawn well out of its bed toward the median line, when with a long hypodermic syringe a small part of the solution is injected at the upper, middle and lower portions of the tonsil anteriorly and posteriorly, respectively. The solution should be injected into the tissues surrounding the tonsil and not into the tonsil itself. One syringe full of the solution is usually employed for each tonsil. In some instances both tonsils can be removed painlessly with a single syringe full of this solution carefully distributed. In a few moments the tonsil becomes bleached, when it can be removed painlessly and practically without hemorrhage.

I use sharp forceps, especially in submerged tonsils. The tonsil penetrated, one blade entering near its upper portion and the other below the middle, care being used to pierce in the direction of its attachment to the superior constrictor muscle. If the tonsil is very friable, I penetrate to the sheath of the tonsil in order to get a firm hold; then the tonsil



Dr. Sawtell's Bayonet Forceps for grasping submerged tonsils.

is drawn out in the same manner as when administering the local anæsthesia. The first incision is made above the supra-tonsillar fossa, where it will be found much easier to get back of the sheath. Then with a curved probe pointed knife the incision is continued downward in front between the tonsil and the anterior pillar to the base. Then the tonsil is pulled in an outward direction, gently twisting it so as to bring the posterior attachment well in view. The incision is carried from above downward in the same manner separating it from the posterior pillar and uniting the two incisions at the base. A cold wire snare is then placed in position and the tonsil seized with a forceps through the loop, when gentle traction is made, care being exercised not to draw the superior constrictor muscle into the loop of the snare. The operation is then quickly completed by drawing the wire into the canula of the snare.

I have described what may be termed a text-book operation, but unfortunately for the operator, complications are frequently found that render the operation more difficult than is usually described. In some children the mouth is very small and the angle of the fauces very acute. This renders the work difficult on account of the small field for operation.

When the tonsils are completely submerged, and the pillars adherent, the operation will be found difficult unless the bayonet forceps is used.

When patients have suffered from frequent attacks of peritonsillar abscess, the capsule of the tonsil is so firmly attached to the sheath of the muscle that it is often difficult to make the separation without endangering the muscle.

Severe hemorrhage at the time of the operation, or following it, is a condition that any operator may justly fear unless he is fully prepared to meet the emergency. I employ the following procedure for the greater part of which I claim originality:

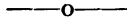
The thumb is immediately placed upon the mouth of the bleeding vessel and firm pressure made. A bayonet forceps is seized with the other hand, and, as the thumb is removed from the bleeding point, the vessel is caught deep into the tissues and

crushed; the forceps being allowed to remain for a few minutes.

It will be noted from what has already been said that the larger blood vessels supplying the tonsil penetrate the superior constrictor muscle. If hemorrhage continues after removing the forceps, the blood vessel is again seized and firm traction is made toward the median line, when the sinus tonsillaris can be partially everted; then, with a half curved needle, a ligature can be placed close to the edge of a narrow bladed forceps on either side, a method which has always succeeded in controlling hemorrhage. This causes much less traumatism and greatly lessens the danger of infection compared with the older method of stitching the pillars together.

The superior constrictor muscle is very thin and the loose bucco-pharyngeal fascia back of it makes an eversion of the sinus tonsillaris comparatively easy when all bleeding points can easily be seen and hemorrhage controlled.

The operation consists practically in drawing the superior constrictor muscle through the sinus tonsillaris to the inner border of the pillars of the pharynx. In doing this care must be exercised to grasp only the muscle and its fascia which forms the outer boundary of the sinus tonsillaris.



The Presence of Tubercle Bacilli in the Blood.—Rosenberger (*The American Journal of the Medical Sciences*), states that he believes that all forms of tuberculosis is a bacteriæmia, and offers as proof the fact that in every one of fifty cases tested he has been able to demonstrate the bacillus in the circulating blood. In only one instance was any other pathogenic organism found; consequently he considers that mixed infections are much less common than has hitherto been believed. The technique is as follows: Under aseptic precautions 5 cc. of blood are taken from a vein of the arm. This at once placed in an equal amount of 2 per cent sodium citrate in normal salt solution. The mixture is well shaken and placed in a refrigerator for 24 hours. At the end of this time a quantity of the sediment is pipetted off and a rather thick smear is made on a glass slide. This is dried by moderate heat and the slide is placed in distilled water until complete laking of the blood has resulted. The slide is then stained by the usual method for tubercle bacilli. The organisms as a rule were found in the first slide, but in several cases three slides were thoroughly searched before any were demonstrated.—*New Albany Medical Herald*.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1909, it incorporated the Wyandotte County Medical Journal owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

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EDITORIAL

Pay your dues and be in good standing when the Society meets in May.

—o—

The American Medical Association meets at Los Angeles, June 27-30. It would be a pleasurable as well as profitable summers vacation to attend the meeting.

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If you are in favor of medical organization with all of its attendant benefits you should help the state society by your presence at the Annual meeting. Take part in its deliberations for the good of yourself and the society.

—o—

Dr. Charles S. Huffman of Columbus, secretary of our State Society, has been recently appointed Commander in-Chief of the State Militia, by Governor Stubbs.

Outside of the above office, State Senator, Chairman of the Ways and Means Committee of the Senate, Secretary of our State Society and President of a bank, the doctor has very few duties of a public character.

—o—

Easy Writing Versus Easy Reading: A Hint To Authors.—The considerable amount of work required of the editor in preparing manuscripts for publication has led the editor of the Journal

of the Indiana State Medical Association to voice a protest against the carelessness of authors in sending in their papers. The indictment is a true one. Writers could relieve the editor of much unnecessary work by a little care; and since, after all, no one should be so competent to set forth a man's own ideas and experience as himself, such care would result in a better presentation of the subject than can be given by the most careful reviser. We refer particularly to case-reports, which are often presented in varying degrees of unprintable condition, sometimes being sprinkled with abbreviations devised by and intelligible only to the author, and sometimes merely defiant of grammar and syntax, but frequently requiring what amounts practically to rewriting. It would seem that the reports usually consist of disjointed, fragmentary notes jotted down at the time of examination, without revision, with verbs omitted from sentences, words, clauses and phrases separated by periods, the whole sounding like a telegram, with every rule of construction and punctuation violated. It would be no more difficult to make a case report a plain, consecutive narrative, conforming to the rules of good style, than to write the remaining text of the article in the same manner. The little time required would be well spent, for the "easy writing" which, as Byron said, "makes d—d hard reading," might almost as well not be done at all. We endorse the sentiments of the editor from Indiana.—Journal A. M. A.

It would be a wondrous help to the editor if he could have corrected typewritten manuscripts submitted for publication.

—o—

The annual meeting of the State Society, will be held at Kansas City, May 3-4-5. Headquarters will be at the Grund Hotel. The sessions will be held at the Masonic Temple, corner 7th and Ann Ave. The annual banquet will be held on Thursday evening at the Masonic Temple, at seven o'clock. Some noted after-dinner speakers have accepted invitation to respond to toasts. On Thursday morning at 10 o'clock an automobile ride will be given the ladies. There will be other entertainments which the committee has not as yet worked out. The guests of the Society will be Dr. H. W. Woodruff, president of the Chicago Ophthalmological Society, Dr. Bransford Lewis and Dr. Wm. Engleback of St. Louis, who will present papers before the general session. Following is the program which is not in its entirety:

President's Address.

"The Perineum," H. H. Heylumn, Hutchison.

"Injuries to the Eye," H. W. Woodruff, Chicago.

Paper, H. G. Welsh, Hutchison.

"Cystoscopy," Bransford Lewis, St. Louis.

"The Lane Operation for Cleft Palate," M. T. Sudler, Lawrence.

"Hypothermia," H. L. Chambers, Lawrence.

"Tobacco," E. Smith, Lawrence.

"Pyloric Obstructions," G. W. Jones, Lawrence.

Paper, D. T. Muir, Alden.

"A Message," J. W. Bolton, Iola.

"The Physiological Chemistry of Psychic Emotions," J. M. Winegar, Hamilton.

"Hyperchlorhydia, Diagnosis and Treatment," W. C. Lathrop, Norton.

Joint Paper, C. J. McGee and P. B. Matz, Leavenworth.

Paper, C. S. Kenney, Norton.

"The Differentiation of Some Chronic Abdominal Lesions," A. Silverstein, Hayes.

"Clinical Report of Ten Cases of Pulmonary Tuberculosis," W. E. Royster, Chanute.

Paper, T. W. Myers, Protection.

"The Significance of Certain Signs and Symptoms in Acute Infective Appendicitis," F. A. Carmichael, Goodland.

"Diagnosis," E. E. Hubbard, Shawnee.

Paper, E. W. Boardman, Parsons.

Paper, R. M. Bennett, Mound Valley.

"Blastomycosis," C. W. Longenecker, Kingman.

"Typhoid Fever," C. F. Crank, Anthony.

"A Report of One hundred Recent Consecutive Accouchments," D. R. Stoner, Quinter.

"The Diagnosis of Chest Diseases," Wm. Engleback, St. Louis.

"Immuno-Therapy Applied in Surgery of the Bones," C. W. Lawrence, Emporia.

"Treatment of Occipito Posterior Position," Geo. C. Mosher, Kansas City.

"A Study in the Examination of the Insane," T. C. Biddle, Topeka.

"Diabetes," J. L. Work, Topeka.

"Surgical Treatment of Aneurysm," J. D. Freeman, Topeka.

"Acute Intestinal Obstructions," R. C. Lowman, Kansas City.

"Report of a Case of Desmoid of the Stomach Wall, and Other Recent Pathological Specimens," Geo. M. Gray, Kansas City.

"Bacillus Necrophorus as a Factor in Necrosis," Frederick M. Shaw, U. S. Army.

The following resolution was passed at the last meeting of the Shawnee County Medical Society:

"Whereas, lodge and club contract practice is now one of the most serious problems and demoralizing influences with which our profession has to contend; and

Whereas, this system has impoverished the medical profession of Great Britain, Austria and Germany; and

Whereas, the whole spirit and practice of the system is to lower the dignity of the medical profession, degrade it in the eyes of the general public, do away with the family physician, commercialize and cheapen medical service; and

Whereas, such lodge and club practice demoralizes the pecuniary rewards in a profession already poorly paid, makes even those outside of the clubs and lodges contemptuous and unwilling to pay regular prices, and causes members of the profession to shamelessly underbid one another for the privilege of serving well-to-do people for a trifle therefore, be it

Resolved, That the Shawnee County Medical Society, with the best interests of the public and of its members at heart, protests against the further spread of this practice in our community and urges all its members to discredit it and withhold their services from such an enterprise."

In pursuance of the above resolution the following amendment to Chapter 4 of the By-Laws was proposed and will be voted on at the next regular meeting:

"Sec. 5. This society shall not sanction or approve club or lodge practice, but shall hold any member who shall engage in such practice guilty of unprofessional conduct and subject to such action as is provided for under Sec. 7, Chap. 1, of these by-laws."

H. MILTON CONNER, Secretary.

It is the consensus of opinion that there is no place in the medical profession for lodge and club contract practice.

There is absolutely no argument for it. It certainly lowers the dignity of the practice of medicine, cheapens and commercializes it and as the resolutions say degrades it in the eyes of the public. The great wonder is that definite action has not heretofore been taken by every medical society in existence.

Physicians as a rule are slow to see mistakes of this character, and now is the time to awaken from the lethargy and stamp out this ever increasing evil.

SOCIETY NOTES.

Leavenworth County Medical Society, at its annual meeting elected the following officers: Dr. Harley J. Stacey, president; Dr. Charles J. McGee, vice-president; Dr. Jacob L. Everhardy, secretary-treasurer, and Dr. J. Waldo Risdon, delegate to the state medical society, all of Leavenworth.

Harvey County Medical Society, at its annual meeting in Newton, elected Dr. Richard S. Haury, president; Dr. Max Miller, vice-president, and Dr. Frank L. Abbey, secretary-treasurer, all of Newton.

The regular meeting of the Sumner County Medical Society was held March 30. The following program was given: "X-Ray in Diagnosis and Treatment, Dr. Pendell; "Discussion of the following Subjects, "Shall the Medical Society do the County pauper practice?" Formation of Tri-County Medical Society. (Kay County, Okla., and Cowley and Sumner County, Kansas), Election.

T. H. JAMIESON, Sec'y.

Following is the program for the South-east Kansas Medical meeting to be held at Independence, April 11:

Paper, J. B. Edwards, Chanute; Paper, E. C. Wickersham, "Vital Statistics", Independence; Paper, "Septic Endometritis," H. H. Brookhart, Scammon; Paper, D. W. Reid, Iola; Paper, "Arterial Sclerosis," C. A. Thomas, Edna; Paper, "Syphilis as Seen and Treated by the General Practitioner," G. A. Bladsel, Garnet; Paper, "Eyes and Ears of School Children," Hugh B. Caffey, Pittsburg; Paper, "Appendicitis from a Practical Standpoint," Wm. F. Coon, Caney; Paper, "Varicose Veins," N. C. Morrow, Altamont; Paper, "Diagnosis and Treatment of Gastric Ulcer," P. T. Bohan, Kansas City, Mo.

In addition to the regular program the physicians of Independence will present some interesting clinical cases.

NEWS NOTES

**DON'T FORGET THE ANNUAL MEETING AT KANSAS CITY
MAY 3-4-5.**

Physicians Indicted.—Eleven indictments are said to have

been returned by the United States grand jury at Kansas City against physicians of that city charged with violation of the federal statute which makes it a crime for any one to use the mails for the dissemination of information regarding the induction of abortion. The accused were arraigned February 28, pleaded not guilty, and were released on bonds of \$5,000 each.

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MISCELLANEOUS

International Congress of Surgery.—The third congress of the International Surgical Association is to be held at Brussels Sept. 26-30, 1911, with an exhibition of fractures and methods of treatment in addition to the usual exhibition of surgical instruments and appliances. The three subjects to be discussed are surgery of the lungs and pleura, colitis and pancreatitis. Prof. Depage is the secretary general, Avenue Louise 75, Brussels, Belgium.

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For Sale.—Office fixtures, instruments, drugs and driving outfit. Town 500 people, natural gas. Territory North and South unlimited. East 12 miles and West 15 miles. Want to leave not later than June 1. Will make terms on all or part. Address X7. %Journal.

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Perhaps some medical casuist would like to decide the following questions: Should a physician hesitate to induce the morphine habit in incurable malignant disease, diabetes, or rheumatism? If this has been done, should the patient be obliged to secure a new prescription at the price of a consultation whenever his supply of the drug gives out? When legislation regarding the sale of alcohol and other sedatives is under discussion, it might be well to obtain the opinions of one or two experienced practitioners of medicine. We have heard a very rabid medical reformer advise against depriving of his daily whiskey an aged veteran of the civil war. De Quincey and Wilkie Collins became opium eaters in middle age. Many ataxic subjects carry a hypodermic syringe. Should such people be encouraged in disrespect for a law they cannot observe, or should the law be drawn in a way to safeguard the public without depriving hopeless invalids of their one solace in life?—N. Y. Medical Journal.

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Education by Billboards.—During the next few months 20,000 educational billboard posters will be sent broadcast through

the United States by the National Association for the Study and Prevention of Tuberculosis. The National Billposters' Association has donated free space, the Poster Printers' Association has offered free printing, and nine paper manufacturers have given the paper for the posters, for which six different designs have been prepared. In graphic form the posters are to show how fresh air, good food, and rest, cure tuberculosis; how bad air, overwork, and closed windows lead to it; and how the careless consumptive menaces the health of his family by spitting.—Medical Record.

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A woman wrote to Washington asking the government how she could cure herself of tuberculosis. The government had no information to give her, and a year later she passed away of this preventable disease. At the same time a farmer—her next door neighbor—wrote to Washington about his sick hog. He got his information and it saved the hog's life. "Be a hog and worth saving!" they say in Washington as they tell this story.

But just how long are the American people going to stand for the injustice of having a department at Washington to save hogs and no department to save human beings? We cannot too urgently insist that this government shall institute and support a national department of health at Washington, and end this ridiculous condition.—Ladies Home Journal, March 1, 1911.

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Puck on Animal Experiments.—Not all comic papers are silly, neither are all editors of such papers devoid of logic and common sense. After the unfair and ignorant diatribes of Life on animal experimentation, the cartoon in last week's issue of Puck is distinctly encouraging and refreshing. The artist has portrayed a venerable scientist standing by his laboratory table, on which is strapped a rabbit. The assistant, with ether cone in hand, is ready to administer the merciful anesthetic. On the one hand a crowd of sentimental antivivisectionists, well-fed, well-clothed and healthy, are crying "For Mercy's Sake, stop!" On the other hand, a shadowy throng of sufferers, the maimed, the crippled, the sick and the dying are groaning "For Humanity's Sake, Go On!" The scientist, looking from one to the other, is evidently weighing in his mind the arguments for and against animal experimentation. Puck's cartoon, making an appeal to the reason and the intellect, is a distinct contrast to the frantic efforts of Life, which have appealed only to the ignorant, the emotional and the sentimental. In behalf of suffering humanity, we extend our thanks to Puck. May his shadow (and his circulation) never grow less. Journal A. M. A.

Wasting Time.—When I was young I wasted time in sweating o'er the prose and rhyme, of grand old bards and sages, men world-famed as masters of the pen. When these old masters had a thought they hid it 'neath a ton of rot, and one must dig and claw and rake, to find the meaning of each break. The highbrows told me I must scratch around that verbal garden-patch if I would store my youthful mind with thought-gems, brilliant and refined. And all that work was thrown away; and now that I am old and gray, no longer my ambition fired, the grand old writers make me tired. I do not care how great his fame, I care not for a poet's game, unless he makes his meaning clear; if I must dig for half a year, to find what he is driving at, I'll throw his volume at the cat. There is no sense in writing dope that makes the reader dig and grope. The writer who is truly great is he who dishes up his freight of burning thoughts in words so plain that any man with half a brain gets wise to what he has to say and reads and puts his book away. The skillful craftsman turns his hand to writing things men understand.—Walt Mason

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Should Gonorrheics Marry?—Should gonorrheics marry? That depends upon just what is meant by the term "gonorrheic." If it includes only those individuals who are actually suffering from gonorrhea in some stage of the disease—acute, subacute, or chronic—there can be but one possible answer. Such victims of their indiscretions should most emphatically refrain from marriage until free from the disease. Should they contract a marriage before this event, they are morally, if not legally, criminal, and the sickness or death of the woman so married resulting directly from venereal infection of the pelvic organs should be laid at the door of the guilty party. The view held by some extremists that the term "gonorrheic" should embrace all individuals who are having or have had the disease at a more or less remote period cannot be accepted by us. Such a contention admits at once a belief in the incurability of gonorrhea—a view which we are not willing to accept in the light of our present knowledge of the disease. As far as womankind is concerned, there is a very grave doubt as to possibility of an absolute cure. This danger is vastly increased if the gonococci have found lodgment in the uterine cervix or upper portion of the generative canal. In men, probably the great majority of cases of gonorrheal infection end in an absolute cure, without resultant stricture or other apparent ill effect. A small percentage comparatively speaking, remain uncured, and

are constant menaces to those with whom they are sexually intimate. No man, then, who shows the slightest amount of urethral discharge even amounting to only a slight gluing of the lips of the meatus, should entertain the thought of marriage until his every symptom has subsided for months or years.—Indian Medical Record.

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Doctors Digging the Ditch.—Under the above heading the St. Louis Republic recently made the following editorial comment: "When a great medical inventor or chemist discovers anything which promises to be or is of great benefit to mankind his discovery or invention at once becomes the common property of the human race without royalty or rate beyond that of personal service of the physicians who may administer such remedies.

"When a great commercial chemist or inventor makes a discovery of value to humanity he at once capitalizes it and all mankind pays high tribute in the form of sometimes prohibitive royalty. In digging the Panama Canal the United States is obliged to pay tribute to monopolists of machinery and to patentees of various mechanical devices. Yet, had it not been for the physicians who have made the canal zone habitable through sanitation the efforts of all the inventors and "world conquerers," of engineers and machinists would amount to exactly nothing. The doctors of the United States, not its engineers or mechanics, are doing the most important work in the great Isthmian ditch. Yet, it is the soldier, the engineer, the mechanic to whom the honors are accruing. Why is it that temporal honor and financial reward seem so bent upon being diverted from the ways in which they should properly travel?

"The construction of the Panama Canal has been, and is, a magnificent object lesson on the possibilities of prevention of disease by the application of facts connected with modern scientific medicine. No one will deny that the French had as good plans, as good engineers, as good machinery, and as good workmen as we have; but the French could not build the canal. And what was the reason? Simply that they could not keep enough men out of the hospitals and graveyards to complete it. The men sickened and died as fast as they could be imported. When the United States undertook the construction of the canal, the government did not call in the representatives of various erratic cults, "mind-cure healers" or patent medicine vendors to solve the problem as it related to health. Its solution was trusted to educated, experienced, specially trained, scientific medical

men; to those who brought to its solution the latest and best methods of modern science. And the results have justified the methods. The civilized world has marveled at the result of the work of the Sanitary Department of the Isthmian Canal. Yet, it is simply the application of modern medical science. There is not a village, not a city, not a State that cannot secure equal results in the way of prevention of sickness and the saving of life, if such methods are adopted and if competent men are given authority and opportunity."—Journal A. M. A.

Obituary.

Charles Austin Jennings, M. D. Starling Medical College, Columbus, O., 1889; formerly of Delevan, Ill; died at the home of his aunt near Olathe, Kan., February 21, from tuberculosis, aged 43.

Valentine Fritts, M. D. Kansas City (Mo.) Hospital College of Medicine, 1885; died at his home in Luray, Kan., February 5, from pneumonia, aged 61.

Napoleon B. McKay (license, Kansas, 1901); of America City; for fifty-four years a practitioner of Kansas; died at the home of his daughter near America City, February 4, aged 84.

Case Reports.

Bladder Paralysis.—A case of bladder paralysis following normal pregnancy and delivery and simulating ovarian cyst complicated by pelvic infection, and operated on this diagnosis, is reported by H. J. Rellihan and J. Simon, Sanborn, Iowa (Journal A. M. A., March 11.) The patient passed urine regularly, from four to eight ounces about every two hours, alkaline in reaction but normal otherwise. At operation, the real nature of the tumor was not recognized until the trocar was inserted and three gallons of urine withdrawn. The viscus was closed with No. 2 chromic catgut, great care being exercised not to injure the mucosa, and the abdominal incision closed the usual way, all healing by primary union. The patient was then treated as in any postoperative case, plus bladder treatment, with hexamethylenamin given regularly. Though some bladder and kidney infection followed, it was not serious and the patient was discharged well on the eighteenth day. The authors call attention to the importance of catheterization in such cases, before opening.

Quinine A Cause of Ectopic Pregnancy.—Lenchen, in the Medical Record, declares that the custom of self-medication with quinine, especially in malarial districts, is so prevalent that it should be discouraged as far as possible. Quinine is indicated in one disease—malaria—for its specific action on the malarial organisms. What other therapeutic practices it may possess as a tonic, antipyretic, etc., are surpassed by other remedies.

Quinine being a protoplasmic poison with a specific action on cells having ameboid movements, it may also arrest the movement of the ciliated epithelium, and so interfere with the physiological action of the ciliated cells in the Fallopian tubes, the function of which is supposed to be to create a current which carries the ovum from the ovary to the uterus. If this ciliary movement is arrested the impregnated ovum may implant itself at some other place than in the uterus, and so give rise to an ectopic pregnancy. The author knows of two cases where no etiological factor could be found except that the patient was taking quinine at the time gestation ought to have taken place.—Medical Standard.

Hernia of the Fallopian Tube.—Parks, in the Journal of the A. M. A. reports a case of femoral hernia of the right side including a pathologic Fallopian tube which could not be safely reduced. The tube was therefore extirpated close to the uterus, together with a large cystic ovary plastered up against the femoral ring. The case is not reported on account of its rarity, although it is unusual, but as pointing out certain principles of operative surgery. Routine methods are not available here. In this case the abdomen was opened in the median line and the pelvis explored, revealing the conditions. The tube was removed by excising elliptically into the right cornu and the tube lifted out of the sac through the femoral incision. The most plausible cause of the condition is that the hernia was originally a small intestinal or omental hernia; that the abdominal contents were reducible; and that at some time when reduced were replaced by the tube which later became inflamed, adherent and irreducible. The strangulation occurred because of the interference with the tubal return circulation. It should have been a case of ovarian as well as tubal hernia, but, on account of the small ring or the cyst condition of the ovary, this was impossible.

CLINICAL NOTES

Itching.—Ralph Bernstein recommends a lotion composed

pulv. calamine, pulv. zinc oxide, and glycerine, of each a dram, to four ounces of lime water. It should be well shaken before applying, and be applied by pouring a little of the lotion into a saucer, moistening a piece of linen with it, and simply dabbing the itching surface. Cotton cloth absorbs too much of the lotion.—Medical Standard.

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Satisfactory reduction is the most important step in the treatment of Colles' fracture. Once reduced the fragments have little tendency to displacement; therefore, prolonged immobilization without frequent movement of the wrist will result in a stiff joint, for which the nature of the injury does not provide excuse.—American Journal Surgery.

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Acute gonorrheal salpingitis is rarely seen, In pyosalpinx attributed to a gonorrheal infection, oftentimes no gonococci will be found in the pus, this organism being replaced by others usually found in pus accumulations.—American Journal Dermatology.

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Eucalyptus in Eczema Capitis.—Atkinson related a case of eczema capitis in a girl aged twelve years who had no previous history of seborrhea. When first seen the entire scalp of the patient was affected. The hand was covered with a scab, which, when removed, left a raw inflamed surface, from which serum freely oozed. The disease extended behind both ears, and fissures had developed. Both meatuses were attacked. The child was put on cod-liver oil and the usual remedies applied. The hair was clipped short a dozen times, which often resulted in a temporary improvement, but which was always followed by a relapse.

The author finally made up an application consisting of acid salicylic 3j, ol. eucalypti 3j, ol. olivæ ad 3vj, which was rubbed into the scalp twice a week. A speedy and seemingly permanent cure resulted. The ears were syringed with a carbolic solution 1:80 and then were moistened with the oil by means of a cotton-wool pledget on a probe.—British Medical Journal.

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(1) In many epidemics of influenza or grip, the influenza bacillus plays little or no part as an etiological organism.

(2) These epidemics appear to be due to a variety of organisms—the pneumococcus, staphylococcus pyogenes aureus, streptococcus and micrococcus catarrhalis, being most commonly found in the secretions.

(3) Complications following these cases are often serious and usually due to the pneumococcus and streptococcus.

(4) The influenza bacillus is often found in the so-called grippal pneumonia, but not in all cases; it cannot be counted the primary cause. An abundant mixed bacterial flora is characteristic of the secretion in these cases.

(5) Influenza bacilli are commonly found in great varieties.

(6) Experiment, both on animals and humans, demonstrates that these bacilli possess pathogenic properties, but they are often, or at least sometimes, nonvirulent as they occur in the secretion.

(7) As secondary invaders they undoubtedly unfavorably influence other primary infections.—D. J. Davis in *Archives of Internal Medicine*.

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A New Dermatological Paste.—A new zinc oxide paste for use in certain conditions in which an absorbent is indicated is mentioned by Dreuw (*Monatshefte für praktische Dermatologie*, 52, No. 3) as originating with Unna. Its composition is as follows:

3 Zinc oxide, 3iiss;
 Precipitated silica, gr. xxx;
 Benzoinated lard, 3vii.

M. ft. unguent.

This paste has a greater attraction for capillary moisture than the well known Lassar's paste of the following composition:

R Zinc oxide,
 Starch,
 Petrolatum, aa partes equales.
 Wool fat,

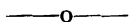
M. ft. unguent.

The use of the paste which, Dr. Dreuw calls cement paste, is recommended in the treatment of eczema madidans and other dermatoses characterized by supersecretion of moisture, the precipitated silica being credited with excellent absorbent and drying properties. Various medicinal agents may be incorporated with the basic paste, as ichthyol, sulphur tar, pyrogallol, etc.

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Impressions Gained from a Series of 50 Cases Subjected to 606 Injections.—Goldenburg and Kalinski in the *Amer. Jour. of the Med. Sciences*, deal extensively with their experience with salvarsan in a series of 50 cases and some of their conclusions are of much interest. This paper is one of the most dispassionate salvarsan articles which have so far appeared in the medical press. All cases with organic lesions of the heart, kidney involvement or eye trouble referable to the optic nerve (other than those of specific origin) were rejected. Most of the cases were out of bed

within twenty-four hours following injection, unless suffering from the severe pain of the alkaline injections. With one exception these cases were treated intramuscularly. The conclusion reached by the two observers is that all manifestations of syphilis yield to the salvarsan, at least for the time being. Chancres healed within a week or so without local treatment. Of the secondary skin lesions, the macular and pustular syphilides disappeared much more promptly than did the papular eruptions, these oftentimes proving most obstinate. Mucous patches and eroded papules of the mucous membrane underwent rapid changes. In these lesions salvarsan showed its most brilliant effects. One case of brain syphilis was slightly benefited. Another with diabetes insipidus showed disappearance of the great thirst and the polyuria changed to normal. Wassermann's were made in forty-four cases. Of these thirty-nine were positive and five negative before the drug was given. Of the positive cases but three became negative. If the Wassermann is to be accepted as showing the presence of syphilis then salvarsan cannot be looked upon as curative for it persists after injections. There were five relapses. One patient died (the one case given the drug intravenously). The writers believe the greatest possibilities of salvarsan lie in repeated doses. They further believe that where the Wassermann remains positive after two injections of salvarsan, mercury should be resorted to.—*American Journal Dermatology*.



Nephritis Following Tonsillitis.—Loeb, in the *Journal of the A. M. A.*, from a series of cases and the literature which is extensively quoted, he concludes as follows: "1. Acute Nephritis results from acute tonsillitis far more often than is generally believed. 2. The symptoms ordinarily are not manifested until some time after the inception of the disease. 3. The nephritis is of the hemorrhagic type and differs from that of scarlet fever in that pyrexia, edema, and oliguria are not marked symptoms of the disease. In addition, it follows the angina and is not concomitant as in scarlatina and diphtheria. 4. Judging from the course of the cases reported, there must be many in which a mild nephritis occurs incident to a tonsillitis, which goes on to resolution without patient or physician being conscious of its presence. 5. As each case of lacunar tonsillitis, may be a potential source of acute nephritis, it is incumbent on practitioners to observe the urine, not only during the height of the disease, but for some time after as well. 6. Spontaneous or idiopathic nephritis is

probably often due to tonsillitis that has not been considered as an etiologic possibility. 7. Chronic affections of the kidney may well owe their origin to unrecognized acute attacks of nephritis of tonsillar origin. 8. Much light may be shed on this subject by a study of the urine in a large number of cases of acute tonsillitis."—Medical Standard.

Treatment of Muscular Rheumatism.—Schmidt is convinced that the pain in muscular rheumatism is of the nature of neuralgia and he suggests treating it with injections of physiologic salt solution at the painful points. Peritz has advocated this, and Schmidt's own experience has confirmed the great benefit liable to be derived from injection of 5 or 10 c. c. directly into the muscle at the most painful points. This, he adds, is no etiologic treatment, for the seat of the trouble is certainly not in the muscle itself, but it relieves the pain and that is the main thing. In very old or especially violent acute cases he would not hesitate to do lumbar puncture, following with spinal anesthesia if necessary. Even the puncture alone has given great relief in some cases; in others the effect was only transient. He regards lumbar puncture as harmless under proper precautions, and thinks that a trial of it is justified in severe cases. Kentucky Medical Journal.

Nitrous Oxid-Oxygen Anesthesia.—R. C. Coburn, New York (Journal A. M. A., February 18), points out the advantages of the use of the nitrous-oxid-oxygen combination for general anesthesia in preference to the usual anesthetics employed. It is a mistake he says to think that it is better adapted for minor surgery and short operations than for major work, for the longer this anesthesia is maintained the better it becomes in every way. He has used it in difficult and complicated operations lasting over four hours, and he quotes the testimony of other surgeons to the same effect. The destructive action of ether and chloroform on the blood and the consequent greater liability to infection by destruction of leukocytes is noticed as well as the irritant effect of ether on the organs of respiration. It is the remote effects of these other anesthetics that seem most to be avoided. With nitrous-oxid-oxygen these are absent and he assents to the statement of Gatch that very ill patients with rapid pulse and quick shallow respiration actually seem benefited by this form of anesthesia. He quotes the testimony of a patient that anesthesia by this method was like a pleasant dream as showing how much it describes the discomfort to the patient.

Rupture of the Kidney.—F. Gregory Connell, Oshkosh, Wis. (Journal A. M. A., March 25), reports a case of simple subparietal rupture of the left kidney in a boy of 11, caused by a fall from a bicycle against a street curbing. He was able to walk home but suffered severe pain later and passed bloody urine, and still later vomited, both acts being attended by some relief of the pain. There were rigidity and tenderness in the lumbar region and the second day, symptoms becoming more threatening, an operation was consented to by the parents. Incision was made in the lumbar region, and the hemorrhage within the fatty capsule was observable. Incision freed considerable blood and many clots. There was a stellate tear extending into the pelvis. The wounds of the kidney were sutured, after cleansing, by deep sutures. The fibrous capsule could not be completely sutured. A cigarette drain was inserted and the wound otherwise closed. Recovery was uneventful. Connell reviews the literature, etiology, symptomatology and diagnosis of the conditions and gives abstracts of some recent cases reported. His conclusions are summed up as follows: "1. Owing to the rapid recent increase in the number of reported cases there is reason to believe that subparietal rupture of the kidney is more frequent than the literature would lead one to believe. 2. Shock, injury to other organs and external evidence of trauma are frequently absent. 3. A history of an abdominal contusion followed by rigidity and hematuria, is sufficient data to lead to an exposure of the organ. 4. Slight lesions and complete rupture of the kidney cannot be differentiated by clinical signs or symptoms. 5. Proof that there is an absence of serious rupture is called for before instituting the so-called expectant treatment. 6. Nephrectomy should be reserved for very extensive disintegration of the organ. 7. Conservative treatment, preferably by suture, is indicated in the majority of cases." Connell emphasizes the risk of kidney rupture, and the difficulty of differentiating serious from trivial injury, and thinks it best to treat all cases as serious until they can be proved otherwise.

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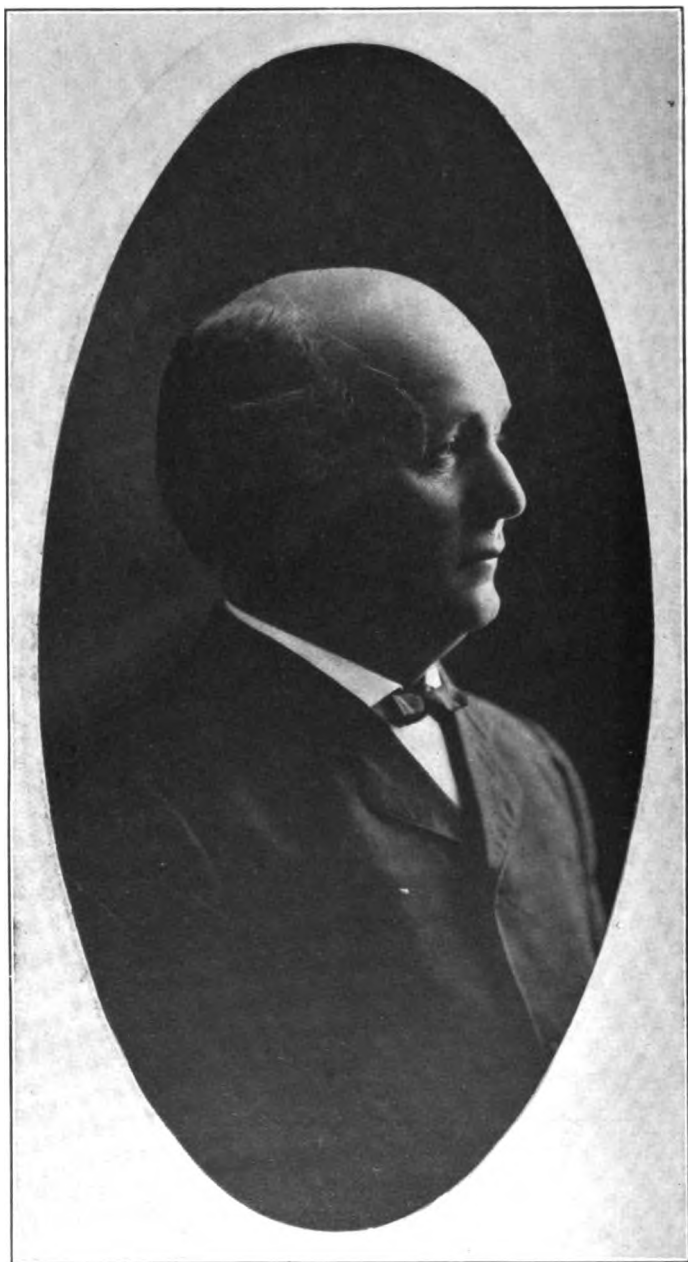
The Anesthetist.—An expert anesthetist is quick to note every change, and can so "nurse" his patient that it is seldom he has any anxiety from the appearance of untoward symptoms. These difficulties may turn up in the hands of the less experienced, who must at times give an anesthetic, and who must, therefore, get the most thorough training possible.

No man can have confidence in his power to administer an anesthetic safely who has not a very clear idea as to what constitutes a danger signal and a definite knowledge of how to proceed instantly and without hesitation to get his patient in to a safer condition.—W. Rankin, in the Practitioner.

Neither Clever nor Truthful.—The attempts of the lay press to comment on medical subjects are often most amusing when most seriously intended. Enjoyment of the unconscious humor in otherwise rather feeble witticisms like some which have recently appeared in *Life*, is hampered by the fact that these gibes at medical science are sometimes not only absurd, but viciously and maliciously untruthful, and, if they were seriously regarded, might result in public injury. For instance, *Life* comments as follows on the recent report that a Russian physician had committed murder by the use of diphtheria germs:

“Why, in the name of common sense, didn't he employ typhoid fever ‘germs’ in the pretense of immunizing the count from ever having that disease, as our army surgeons are doing with all soldiers and sailors who ‘volunteer’—under the pressure of the anger of their superior officers in case of refusal? Every such inoculation makes the lads ill (‘reaction’ is the technical term), and occasionally one of them will pass on, as the saying goes”.

The item is headed “Not Clever.” It should have been “Neither Clever nor Truthful.” According to the surgeon-general of the Army, about 20,000 antityphoid inoculations have been made in the Army of the United States. Of these, 85 per cent. caused no disagreeable symptoms whatever; 4.5 per cent. caused headache and slight temporary fever; and 0.5 per cent. more severe symptoms lasting several days; but in not a single instance has the procedure had any effects that could be called dangerous. There has been no death from this cause. The protective results of antityphoid vaccination in European armies, especially in the British army in India, have been so favorable as to warrant the continuance of inoculation. The comments of *Life* show glaring ignorance. We do not expect scientific accuracy from that publication, but even clowns should strive to keep within the bounds of common honesty by being truthful when they attempt to deal with serious matters, especially those which have a practical bearing on the public welfare.—Journal A. M. A.



DR. J. T. AXTELL,
PRESIDENT KANSAS MEDICAL SOCIETY.

THE JOURNAL

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No. 5

INJURY TO THE EYE.

DR. H. W. WOODRUFF, Joliet, Ill.

Read before the Kansas Medical Society, May 4, 1911.

On account of the more highly specialized and delicate structure of the eye, injuries to this organ possess an interest and importance peculiarly their own. Not only is loss of sight of the affected eye itself a possibility, even from apparently the most trivial lesion; but the surgeon's responsibility is increased many fold by the knowledge that in any case of perforation of the outer tunic, blindness may occur in both eyes through sympathetic inflammation.

Infected wounds in any locality are never trivial, as a local lesion may at any time become general; but when these lesions are in the eye there is, in addition, the danger of serious impairment or loss of special function. Then, too, the several structures of which the eye-ball is composed, their resistance to disease, their power of regeneration or their lack of these important qualities, make special study of each respective part a necessity on the part of the surgeon engaged in this work, if the interests of the injured are to be conserved.

In the more severe injuries there is the question of immediate enucleation versus an attempt to save the globe. In any instance there is also the possibility of medico-legal complications which serves to enhance the responsibility and emphasizes the necessity of greater care in the matter of observation and the keeping of accurate records as to vision, tension and other conditions as they may arise.

It is evident that the importance of an injury to the eye-ball depends upon many conditions, as; first, the structure involved;

second, the extent of the trauma; third, the presence of a foreign body, its nature and the chances of its removal; fourth, the presence of infection and its character. Obviously, in a paper of this kind, one must indulge largely in generalities, and only to illustrate certain conditions, will specific cases be cited. Some one has said that the individual who can do the small things well, is more apt to be or to become able to perform the larger duties. Perhaps nowhere does one see so much carelessness or incompetency as in the removal of small particles from the cornea. And yet nearly everyone, even the laity, considers himself competent to treat these injuries. Considering their frequency and the lack of proper care, serious results are the exception.

In industrial communities the foreign body is often a small particle of iron (so called iron scale), or oxide of iron which strikes the corneal epithelium as a spark. These particles, on account of their intense heat, are sterile when they strike the cornea. If they can be promptly removed with a sterile instrument there is little danger of ulceration, although the eye should be thoroughly cleansed and a bandage applied. By the time these cases are seen by the physician, there is in addition to the small black particle, a small brownish area surrounding it (the so-called stain which results from the chemical decomposition of the iron). This again may be surrounded by a white or grayish-white area which shows necrosis of the epithelium, or perhaps the deeper layer. In order to differentiate these areas, good vision on the part of the examiner is necessary. Often the particles are too small to be seen by the unaided eye, much less removed. Here is one of the chief uses of the Berger loupe. The light, preferable day-light, must also be condensed upon the cornea with a lens. By this means the particles can be differentiated from pigment spots on the iris. The importance of this differentiation is illustrated in a certain case related to me by a colleague.

A physician had continued scraping the cornea until he had perforated it in an attempt to remove a pigment spot in the iris, mistaking it for a foreign body in the cornea. If he had possessed good vision and used the binocular magnifier under good illumination, such a catastrophe could not have occurred.

Another important point is the anesthesia. It is a well known fact that cocaine has a peculiar effect on the corneal epithelium. Repeated instillations cause a drying and exfoliation of the external layers and even the entire thickness of epithelial cells may be separated from Bowman's membrane. This shows the necessity of keeping the eye closed if cocaine is used, or better still, a solution of holocaine may be employed.

A number of instruments have been devised for the removal of foreign bodies from the cornea, but none of them are as useful as the ordinary lid knife of Arlt. This has the proper point and is not too sharp. It is essential to remove the stain which surrounds the particle as well as the foreign body itself without doing any more damage to the deeper layers than necessary, for a cornea which has been repeatedly injured will show, on close examination, numerous opacities which interfere with vision more or less. Much more serious results may follow these injuries, especially the small erosions caused by a scratch from a finger nail or a particle blown into the eye from the ordinary street dust. Infection is almost certain to occur if there is a conjunctivitis or dacryo-cystitis present at the same time.

It is these apparently trivial injuries which, when infected, give rise to that very rapidly destructive keratitis known as ser-piginous ulcer. These are recognized as gray or yellowish-gray opacities in the region of the pupillary area of the cornea. The edges of the disk are more dense and generally more marked in one direction which indicates the advancing edge. All of these ulcers are curable if proper treatment is instituted sufficiently early, before the posterior abscess appears with hypopion and irido-cyclitis.

So rapidly do these ulcers advance and so destructive are they, that one is justified in using the galvano cautery. These cases are hospital cases and require almost constant attention. Rest is secured for the eye by atropine or duboisine. Dilation of the pupil must be maintained throughout the disease on account of the iritis. The patients should be kept in bed with hourly cleansing with warm boracic acid solution. Hot applications should be maintained for one hour three times daily. Frequently these measures are sufficient to bring about resolution. However, one should not hesitate to use the galvano cautery and the deep injection of the cyanide of mercury. The galvano cautery should be applied at a red heat and over the entire area of ulceration. This area is outlined by the application of fluoresine solution. In bad cases I have often cauterized and made the injection of the cyanide of mercury immediately afterward. This is used in the strength of 1 part to 1000 of water. About 8 minims with 4 minims of 4 % cocaine solution are injected into the orbit at the site of the external conjunctival cul-de-sac. The needle is passed through the tissue until it strikes the external wall of the orbit. The point is then turned slightly inward to avoid the periosteum. One must be prepared to see in a few hours a marked swelling of the lids.

In some cases the tension of the eye-ball becomes elevated. If this occurs, paracentesis must be made. These injections may be repeated twice in twenty-four hours for three or four days if necessary.

Aseptic wounds of the outer tunic, cornea and sclera, are attended with little disturbance, even if they are perforating, providing the deeper structures are not injured. Unfortunately the vascular tunic is nearly always involved. The average medical man is particularly helpless in dealing with this class of cases. I wish, therefore, to call special attention to certain symptoms which are significant of certain definite pathological changes and upon which a prognosis can often be made.

The vascular tunic includes the iris, ciliary body and the choroid, and is called the uvea. Inasmuch as this tunic covers almost all of the inner surface of the eye-ball, it rarely escapes when there is a perforating wound. The anterior portion of the uveal tract the iris, is nearly always involved in perforating wounds of the cornea. Iridodialysis, radial lacerations, inversions upon the ciliary body are occasionally seen.

Most common and most difficult to treat are the cases of prolapse. On account of its laxity and its suspension in the aqueous humor, the iris flows almost as if it were fluid, when the aqueous seeks to escape through a wound in the cornea. This is less apt to occur if the wound is central. Recent cases of prolapse are recognized by their color and the distortion of the pupil. Most cases appear black from the pigment on the posterior surface. Very soon the iris becomes covered with exudate and granulation tissue and becomes gray. If the iris is simply attached to the posterior corneal wound, it may be treated with atropine and a bandage. If the iris is in the wound it is seldom possible to replace it and not often advisable to attempt it. Within forty-eight hours after the injury, excision of the iris is the proper treatment. After this length of time, adhesions are so firm between the iris and the cornea that excision is almost impossible. In such a case, a pressure bandage, until a flat cicatrix has formed, is the better treatment. The galvano cautery has often been used to destroy these prolapses and cause the formation of a flat cicatrix. It is claimed by Gifford of Omaha, that there is more danger of sympathetic ophthalmia following such cauterizations. He recommends cauterizations with glacial acetic acid; his theory being that the eschar from the galvano cautery affords an entrance for infection, while that from the glacial acetic acid does not. The writer was unfortunate enough to have a case of this kind in private practice.

Until the cause of sympathetic uveitis is positively known, it is well to heed the warnings of authoritative writers, and not to use the galvano cautery on the iris in any case.

Omitting those cases in which the eye is lost from corneal ulceration, by far the greatest number are lost from involvement of the ciliary body either from direct injury or by extension. It is of the utmost importance to the surgeon to be able to recognize, clinically, cases of cyclitis and, inasmuch as foreign bodies in the interior of the eye are a prolific cause of cyclitis, I can illustrate some of the symptoms by the following case: Six years ago a lad of twelve years was brought to my office for examination of his eye. With his father he had just arrived from New Jersey the day before. On the train the boy complained of pain in his left eye, and his father had done what he could to relieve him with hot applications. The boy stated that four days before the eye had been red in the morning and had grown gradually worse. His vision was so reduced that he could only count fingers at one foot. Inspection showed a wound in the cornea and iris at the upper nasal quadrant. For a time no history could be obtained from the boy, but he finally admitted that he had struck his eye against the point of a pencil in school, two weeks before. He was put to bed and a trained nurse put in charge. The next day there was exudate in the anterior chamber, at noon it had disappeared; an exudate also could be seen in the vitreous. I advised consultation as I expected an enucleation would be necessary. One of our best known oculists was consulted and, much to my surprise, gave a favorable prognosis. The boy was, therefore, treated as before with atropine, hot applications and dionin; but at the end of two weeks the condition was worse, exudate constant in anterior chamber and eye-ball soft. I advised enucleation and the boy was taken home where an oculist in New York, who was immediately consulted, removed the eye. While the boy was in the hospital after the enucleation of the eye, he confessed to his mother that a neighbor boy had accidentally shot him in the eye. The examination of the enucleated eye disclosed the shot. The boy had kept silent because the fathers of the boys were not on friendly terms and he feared that if the manner of his injury became known, matters would be still further complicated. I speak of this case because it illustrates the type of symptoms which are always significant of degeneration of the eye, and although the history was valueless the clinical findings called for the removal of the eye, although there was no suspicion of the presence of a foreign body.

The average physician thinks that an inflammation of the

ciliary body must be attended by great pain. This is true of the acute variety, but the chronic form may go on to complete atrophy without pain. I should call this case one of sub-acute cyclitis, with exudate into the anterior chamber and into the vitreous chamber. Any surgeon who treats or expects to treat injuries of the eye must know the symptoms of cyclitis. If there is no involvement of the ciliary body, the prognosis is good. If the ciliary body is injured or involved by extension, the prognosis is unfavorable. The subjective symptoms are of little importance except pain and reduction of vision. Pain is present and severe in the acute form and may be entirely absent in the sub-acute and chronic form. Vision is disturbed first in proportion to the involvement of the transparent media. Our chief concern, therefore, is with the objective symptoms. There is always, even in the most chronic cases, some ciliary congestion, and there may be tenderness on pressure. This may be elicited through the lids over the ciliary body. There is always an exudate. Exudates occur in five localities: First, in the ciliary body itself. This is only seen in the laboratory; second, in the anterior chamber either as hypopion or; third, on the posterior surface of the cornea in the form of dots in a triangular form with the base downward and the apex near the pupillary area. If the precipitates are large they are less regularly arranged; fourth, in the vitreous chamber; fifth, in the posterior chamber, which causes a retraction of the iris with corresponding deepening of the anterior chamber.

Exudate into the ciliary body itself cannot be clinically demonstrated, but may always be found microscopically in eyes which have been enucleated as a possible cause of sympathetic ophthalmia.

Exudates into the anterior and posterior chambers and the corneal precipitates indicate inflammation of the anterior portion of the ciliary body and do not necessarily mean loss of the eye. Exudates into the anterior portion of the vitreous can be seen with lateral illumination as a gray mass behind the lens and indicates inflammation of the posterior portion of the ciliary body, and consequently means a grave prognosis.

The exudate which is seen through the pupil is sometimes mistaken by the inexperienced for cataract. The lens may also be opaque, but even then there is a different color imparted from the depth of the eye. In an injured eye which manifests this symptom with reduction of tension, loss of the eye is inevitable. Enucleation should be performed without waiting for complete loss of perception of light. The surgeon must of course take into consideration that in recent perforating wounds the tension is lowered, as also in

fistula where there is a constant leakage. If too long continued, atropine will sometimes reduce the tension also. These symptoms of cyclitis may occur in perforating wounds with or without retention of foreign bodies. However, as it almost invariably follows, sooner or later, wounds with retained foreign bodies, their early removal is very desirable.

The use of the X-ray for the localization and the giant magnet for the removal of magnetic bodies have made this subject too extensive for consideration in this paper. However, inasmuch as these cases are often seen by the general practitioners and, unfortunately, sometimes not recognized, it may be well to consider some points in the diagnosis and the first aid.

In any case in which a perforating wound can be demonstrated, and the history does not clearly indicate that it was done with a knife or wire or in some similar way, then a retained body should be suspected. Subjective symptoms are of little value. In case of doubt, I would suggest to the general surgeon that he follow that famous advice given by William E. Quine for the treatment of typhoid fever, and use "judicious well sustained and masterly inactivity." Never attempt to probe an eye; never attempt to put a stitch in the sclera. Have an expert in localization as soon as possible. If the foreign body is not magnetic, let it alone until it is very accessible. If it is magnetic, let an expert remove it with the giant magnet.

In conclusion let me repeat: See that your own vision is normal. "First cast out the beam out of thine own eye, and then thou shalt see clearly to cast out the mote which is in thy brother's eye." Use the improved methods for illumination and magnification. Treat all wounds aseptically, no matter how trivial. Treat progressive corneal ulcers with the cautery and cyanide of mercury injections. Never cauterize the iris prolapse with the galvano cautery. Frequently examine eyes with perforating wounds for symptoms of cyclitis. When exudate in the vitreous appears with diminishing tension and loss of vision, enucleate as soon as possible.

DISCUSSION.

DR. RICHARD J. TIVNEN, of Chicago: Mr. President and members of the Society, first I wish to thank you for this great privilege of being here and meeting with you and also for the honor of being asked to discuss this paper.

Dr. Woodruff, in Chicago is considered, as many of you know, an authority on the treatment of eye injuries. He has made a special study of this class of cases, and we consider that his word on the subject is in the nature of the final word. This being so, it is rather embarrassing for us attempt to discuss such an entertaining and instructive paper as he has presented to us. However, because of the time limits, the Doctor has not been able to cover or fully develop some of the phases of the subject, as I know he would like to have done, and in fact each particular phase would require

a paper of its own so this provides us with somewhat of an opportunity to add a few words.

One of the most interesting phases of his paper which presents itself to me for the purpose of emphasis is a consideration of that little operation, the removal of foreign bodies from the cornea. We are all more or less prone to consider the removal of foreign bodies in the cornea a very trivial matter indeed, but as Dr. Woodruff has well said, the little things, if well done, will fit one to become more expert in mastering the larger problems. I think this is especially applicable to the consideration of the removal of a foreign body from the cornea.

In considering a foreign body in the cornea it is well to keep in mind the nature and character of the tissue with which we are to deal. The cornea, as the Doctor showed so beautifully in his drawings consists first of the epithelial or outer layer, which provides an almost invulnerable barrier against the inroads of infection. It is the layer which must be considered from a prognostic standpoint. It is the layer also which one must consider in conducting an operating manoeuvre. The cornea, too, as we know, is rather low in point of nutrition, inasmuch as it contains no blood vessels; it therefore affords a fertile field for the development of infection.

We have also the lymphatic spaces in the cornea. It is well to keep in mind a few facts from a clinical standpoint; namely, that wounds of the cornea in elderly persons present a different outlook from wounds in the cornea of a young person because as age advances the nutrition furnished to the part is reduced and therefore the reparative power of the cornea is lessened.

This reparative and regenerative power of the cornea is lessened also in cases of debilitating illness, where the resistance of the patient is lowered; in those cases a trivial wound, such as we call a foreign body is an entirely different matter from a similar wound received when the patient is in good health and physically strong. We all know that men engaged in this special work, as well as those not so specializing, have great difficulty, many times, in removing these little foreign bodies. Most of this difficulty can be ascribed to a faulty technique. As Dr. Woodruff emphasized good illumination is paramount. Some such instrument as this (binocular loop) should be used; not necessarily, perhaps such an elaborate affair as this, but one that insures a good illumination of the cornea. The next very important point is to make your patient and yourself comfortable. I would say of the two, it is primarily important that the operator himself should be comfortable, because he must, to carry out these delicate manoeuvre and if he occupies a strained position, it adds greatly to the difficulty of the removal.

You will pardon me if I mention the method, which seems to me to be best in the removal of foreign bodies: After cocainizing the eye I should have the patient seated in a comfortable chair with head tilted backward, in an easy position; I should stand behind my patient. Having sterilized my instrument, I have the patient look down; then place my first finger on the margin of the upper lid gently pressing against the sclera and gently pushing the upper lid upward retain it in that position, the finger serving, as a retractor. Retaining the finger in position I then ask the patient to look upward, place the middle finger of the same hand on the lower lid at its margin, press gently against the sclera, push the lid downward thus retracting the lower lid. By proceeding in this manner, one obtains, first a wide separation of the lids, second a limitation of the movement of the eyeball, and third, eliminates the efforts at spasmodic closing of the lids that the patient usually makes during the operation. In using the Arltd knife that the Doctor has shown us, which to me is an ideal instrument for the purpose, I think an important point is to have a rest for one's hand. Many times we try to poise the knife in mid-air, and approach the eye, without having a resting point for the hand, when we might just as well attain greater steadiness and security by resting the hand on the cheek or on the brow of the patient. In the prognosis of these injuries it is an essential point to consider the location of the injury. It is the experience of most ophthalmologists that a microscopic scar situated centrally on the cornea may interfere very considerably with the vision. We should consider, therefore, in giving a prognosis, first the position of the foreign body; second the extent of the trauma, not only its circumference but its depth, in other words, how far has

it penetrated the corneal layers?

In the toilet of the wound, after the removal of the foreign body, I believe we should always employ, unless it is an exceedingly trivial injury, a bandage for at least twelve hours. We have seen so many cases of eyes which have gone on from bad to worse simply because the eye had not been given an opportunity to close up and repair the trauma or atrium of infection and place the wound beyond any danger of infection. I would exempt from this routine practice, only cases of trivial injury or those suffering from a purulent or muco-purulent difficulty with the lachrymal apparatus. Lachrymal troubles are very common in people of middle life, and it is important to always investigate the condition of the lachrymal sac in cases of wounds of the cornea and if a pathological condition be present, it would be bad surgery to apply a bandage, but in nearly all other cases, it is the proper thing to do.

Another thing I wish to speak about is the common practice among workmen engaged in shops and manufacturies of removing these foreign bodies from the eyelids or the eyes of one another. There should be a law to prevent this practice, or if that be impracticable, then at the very least there should be a rule of the shop making it obligatory upon all the workmen to report to the office in all cases of foreign bodies in their eyes. The danger of infection is great where an attempt is made to remove such bodies by a fellow workman, who may employ a horsehair, a dirty toothpick, a match, or a finger covered with oil or even summon to his aid what has been denominated the "vacuum process," in which the tongue is applied to the eye. Such practices have proven many times fatal to the eye so treated, and so it would be well if they be prohibited in some stringent manner from continuing the practice.

As Doctor Woodruff indicated an ulcer frequently follows the trauma and the infection. The Doctor has so well brought out all the points of the treatment of ulcer that there is very little left to say, but to express concurrence in everything he has enunciated. There might, however, be special emphasis placed upon the use of the galvanic cautery that he has exhibited to us to-day. I believe the cautery to be a very important therapeutic agent in the treatment of ulcers which are not progressing as they should. We know by experience in the use of the cautery in cases of a prolapsed iris, that it is well, as recommended in the Doctor's paper, to heed such men as Dr. Gifford, who advises against the use of the galvano-cautery in such cases. But where we have an ulcer of the cornea which is not progressing as it should, it seems best to use the cautery. I would almost say, if I were limited to the use of any one therapeutic agent, that I would choose the galvano-cautery in preference to any other in the treatment of ulcers of the cornea. That may be considered a strong assertion, but I believe I am justified in saying it, based upon the experience I have had, and the favorable results obtained. We employ the cyanide injection also in many of these ulcer cases. It has been my good fortune to work with Dr. Woodruff and to observe the favorable effects that have resulted from the use of the cyanide injections. The important point in the use of that therapeutic agent, which I know Dr. Woodruff would emphasize, is that it must be used early, for if one waits until the eye has proceeded to a considerable extent on the down grade, it is asking too much to expect favorable results from the use of the injection, although even in such advanced cases, it acts surprisingly well, and I believe with it, we have a most dependable therapeutic agent.

The time will come I am sure, and indeed is almost here, when in the treatment of ulcers of the cornea, the use of the serums will be much more general than at present. In all cases of ulcer it would be well to find out what specific pathogenic bacteria are present and to employ a serum appropriate to the case. The element of rest is most essential in the treatment of corneal ulcer. In a vast majority of such cases, the patients come to our office for treatment, or present themselves at the clinic. I believe that to be absolutely wrong, and that many of these cases should be considered hospital cases and the patients should be put to bed. It is not difficult to estimate from a reparative standpoint the retarding influence of pain, sleeplessness and anxiety that these patients undergo. I should therefore urge rest. Rest in bed, rest of the eyes, and the administration of opiates, if necessary

to induce sleep, combined with proper constitutional measures directed to the regulation of the diet, and the bowels, kidneys, etc..

DR. J. W. MAY: Kansas City, I should like to add my little mite to this discussion although the exhaustive scope of the paper has left little for one to discuss, simply adding a few words by way of emphasis upon some of the points brought out.

By way of illustration concerning what may happen in a case which might be denominated a simple eye injury, I will cite a case which came under my observation not long since. Last November a man presented himself with a slight injury to the cornea. The history given was that he had been struck by a piece of stone in the cornea upon the Saturday previous to the Thursday when I saw him. The piece of stone had been removed by a physician. At the time I saw the patient, the injury was no larger than a pin-point, but some discharge from the corneal wound indicated the presence of an ulcer. A scraping of it showed the presence of pneumococcus infection. In nine days from that date, the eye was totally destroyed; the ulcer had spread in spite of repeated cauterizations and the employment of every therapeutic remedy I could think of which appeared to be indicated, and had progressed until the cornea was completely involved and perforation had taken place. I feel assured that if I had known of Dr. Woodruff's cyanide of mercury injection, I might have saved that man's eye. I had read of the method, but it escaped my mind at the time this case was presented, and having since seen cases in which this agent has been administered, I am led to believe that the cyanide injection applied at the proper stage of the infection would have saved this eye.

Many times patients come to you with exceedingly dangerous wounds of the eye who do not realize the alarming character of the injury. I was on my way home one day when I was approached by a man who said "I believe I have something in my eye, I was pulling out a bale of hay and a wire flew up and struck me in the eye." I examined the eye, and found there was a wound in the cornea, with the iris prolapsed. After treatment, this gentleman finally recovered his sight, but was confined to his bed a number of days and the sight of the eye was endangered, and even has not entirely recovered to this day. Another point which I wish to emphasize, and that is that an exceedingly large wound may be sustained by the eye, and recovery eventually take place. Last September a man came to me with a foreign body in his eye, which was by actual measurement eleven-sixteenths of an inch long by a quarter of an inch wide, and was buried in the vitreous. It was a piece of metal from the face of a hammer, and had penetrated through the lower eyelid, through the sclera, and in operating for its removal, I seated him in the chair, made an application of cocain, and when anaesthetized, grasped what I thought was the foreign body, which proved to be the foreign body covered over with choroid. Quite a good deal of the vitreous escaped during the procedure. I found that the piece of metal had a sort of fish-hook projection to it, and on the first attempt, was able to get it about one-fifth of the way out, a little of the vitreous escaping with each pull that I made, and as you know, you cannot lose any vitreous, or at least any quantity of it, without endangering the sight of the eye, or causing complete loss of the eye later. I then pushed the foreign body back into the vitreous, then rotated it in order to get this fish-hook projection in line with the point of entrance and was then able to remove it.

Another point relating to the procedure after the removal of the foreign body which might be of interest. After the removal of the piece of metal I attempted to suture the sclera, using an exceedingly sharp needle. There was a hole in the sclera perhaps six millimeters long, and each time I would make any pressure in my attempt to suture the wound, out would come some more of the vitreous. I quickly desisted; I then pulled the conjunctiva as tight as I could across the wound and sewed it. On an examination of the patient yesterday by Dr. Woodruff, it was ascertained that this man has now 20-20 vision, which is an extremely unusual result where so large a foreign body has been removed.

In conclusion, I want to thank the Doctor for his paper. I am sure we have all been able to receive much benefit from it.

DR. ROBINSON, (of Concordia): The remarks made by the Doctor have called to my mind an important point mentioned in the treatment of corneal ulcers. We know that the pneumococcus is particularly known to cause very bad destruction of the tissue in ulcerative conditions within the eye, and if we could determine beyond question regarding the nature of the infectious bacilli we could handle these cases a great deal better and would be more certain regarding the outcome. I presume this comes rather in the field of the specialist to make these examinations, but it seems to me some investigations as to the nature of these ulcers should be made in laboratory work. We know that in the Morax-Axenfeldt bacillus we have a specific form which will respond to the application of zinc very readily without cauterization.

DR. HAYES: Of Seneca, I would like to ask Doctor Woodruff to advise us as to the application of pure carbolic acid or tincture of iodine to an ulcer where the operator does not happen to have a cautery and is not familiar with the use of it for such purposes.

DR. WOODRUFF: (Closing the discussion.) I can agree with the remarks of Dr. Tivenen, in elaborating upon my paper, with the exception of his opening statements. Regarding his remark, that if his choice were to be limited to the use of the one instrument, he would prefer to retain the galvano-cautery, I would say, that fortunately we are not placed in that dilemma, and therefore, I have proposed these two methods, the use of cyanide of mercury, and the galvano-cautery. We are limited in the use of the cautery, which is only available in the treatment of anterior ulcers, but we must not lose sight of the fact that we may sometimes be confronted with a posterior abscess. The cautery would have no effect upon that.

Answering the question propounded by the Doctor as to the use of carbolic acid and tincture of iodine, I wish to exhibit to you this little instrument which you have all doubtless seen advertised under the name of Dr. Todd's cautery and which might prove a very valuable instrument for any of you who do not have the galvano-cautery. The little metal ball on this instrument retains the heat, and you simply hold it over the flame of an alcohol lamp. I frequently use carbolic acid and tincture of iodine in certain cases of ulcer of the cornea, but I have been speaking more particularly about the seriginous ulcer which is almost always due to pneumococcus infection and is the most virulent ulceration we have in the cornea, and in the treatment of which I would adopt the method which I have suggested, but if the ulceration is due to the presence of some other organism of less virulent character, such as the Morax-Axenfeldt bacillus or influenza bacillus or streptococci and so on, then I might use some tincture of iodine or carbolic acid.

I would just like to say a word regarding the method of closing the wound in the sclera referred to by Dr. May. There has been much valuable suggestion made along the line of the closure of wounds in the eyeball by conjunctival flaps. I do not criticize the Doctor in closing that wound in the way in which he did, and will say that he could not have secured any better results by pursuing any other method, but it sometimes happens that you can slide the conjunctival flap, particularly in extensive wounds of the cornea and keep it covered. Of course we cannot use sutures in the cornea, but we can make a conjunctival flap over the cornea or sclera and get a magnificent result.

I would like to refer again to the action of cocain on the epithelium. I have made mention of the use of holocaine, the virtues of which have been impressed upon me by the experience I have had in its use. If cocain has that action on the corneal epithelium which it does have, and there is a drug that will give us the anaesthesia without hurting the corneal epithelium at all, then we have something that is better than cocain. I believe that holocaine is that drug. It is a derivative of phenacetine. It is four times as powerful an anaesthetic as cocain and has no more action on the cornea or the ciliary body or iris other than its anaesthetic effect. Furthermore it is bacteriacidal and is of benefit in corneal ulcers, or in cases of inflammation from the presence of foreign bodies, or in infected wounds of the cornea. I believe we have a drug which will supplant cocaine. The only drawback in connection with its use that I know of, is that its action is more irritating

than that of cocaine; it causes some congestion, but I do not believe that is at all sufficient to offset its superiority over cocaine. The holocaine is used in the two per cent solution.

EYES AND EARS OF SCHOOL CHILDREN.

DR. H. B. CAFFEY, Pittsburg, Kansas.

Read before the Southwest Kansas Medical Society, April 11, 1911.

It would seem from the vast amount that had been written upon this subject in recent years that, there remains but little to be said which can be new or original, therefore it is with some trepidation and hesitancy that I enter upon the subject of Medical Inspection or the systematic inspection of school children., but I consider the matter of such great importance to the present day civilization that a recapitulation will not be entirely out of order.

Medical men should continue to pound upon the subject until Health and Educational authorities cause to be issued, an order compelling the examination of the eyes and ears of all school children once during each school year. Inspection of school children has been continued long enough and has become sufficiently widespread to justify some rather sweeping generalizations. No group of children of any considerable size has been examined without finding numerous defects and disabilities serious enough, not only to affect their school work, but to form a real handicap in their after-school efforts to secure a livelihood. The aggregate amount of discomfort and pain experienced by school children is enough to awaken universal sympathy. The hindrances to school advancement and the consequent waste of effort and of money are matters of serious concern, but the ignorance and indifference which lies back of it all are matters of greater moment, and it devolves upon us as guardians of the public health to lift the veil of ignorance and indifference and open wide the eyes of the educators of this state, to the absolute necessity of proper eyes and ears for our school children, if they would be a success, not only as students but in the various walks of life, after leaving the school room. Up to the present time we have not had statistics sufficient to give any real valuable and reliable information, but in a paper before the American School Hygiene Association, Dr. Leonard P. Ayers of the Russell Sage Foundation, after giving the figures and percentages of 23000 school children affected in 15 schools in Manhattan, has this to say, "We have for the first time figures which conclusively demonstrate that there is a real relation between physical defectiveness and school progress.

It is a matter of common observation that the brightest and most studious pupils are afflicted with defective eyesight. There is also a steady increase in defectiveness with the advance of age." This shows that a slight error if allowed to go uncorrected will advance under the strain of constant use such as that to which the real studious will subject their eyes. He also says "The sums of money spent annually in N. Y. City for public education reach high into the millions. It would be a very simple matter to compute how many dollars are wasted each year in the futile attempt to impart instruction to pupils whose mental faculties are dulled through perfectly remedial physical defects.

By school inspection in Massachusetts it was discovered that out of 400,000 children examined, 81000 were defective in vision and 22000 in hearing, to say nothing of the other defects such as adenoids, bad teeth and etc. It is also estimated that there are 20,000,000 school children in the United States and of this number 16,000,000 or about 80% suffer from some eye, ear, nose and throat or throat disease, which can be easily detected and generally cured by early medical attention and which will become chronic or incurable if neglected. Now, we have no figures by which to estimate the percentage of defectives in our Kansas schools but I think you will agree that we should expect an average amount at least of such disabilities among the children of this state.

No argument is necessary to convince those in control of our public schools of the need of systematic annual examination of the eyes and ears of school children, for it is an undisputed fact that healthy eyes and ears are the first essential to the ready requirement of an education. Almost all children are born with healthy eyes and ears and such conditions as myopia, hypermetropia, acute and chronic inflammatory conditions are due to malnutrition neglect or excessive use of the eyes under improper conditions, most of which could be detected and corrected if discovered in its incipency. Latent errors and even manifest errors of a low degree are not usually detected until the child begins school work, and if they are allowed to continue such work without the proper correction, the refractive error develops at an alarming degree, and only too often irreparable damage is done before the parents are aware that there is anything wrong. I have no doubt that many children have been punished by parents and teachers for failing to "learn a lesson" or to be promoted, when in reality the eyes were entirely to blame. Only a few weeks ago a father brought his son into my office and said he wanted me to tell him if there was anything wrong with the boys eyes, that he

was of the opinion that the boy did not want to go to school, but that as the child had claimed he could not see, he wanted his eyes examined before punishing him. Upon examination I found progressive myopia to a marked degree. Wise father this, but we know not how many boys get the punishment before the examination.

We often hear it marvelled at that such a small percentage of our children remain in school and complete the high school course. Would it not be very interesting and instructive to know what percentage of those who fail to complete the course have defective eyesight?

The two principal defects, myopia or near sight and hypermetropia or far sight are very easily detected, and any school teacher can be taught to make the test in ten minutes. The average increase of myopia during school life is 20 % and this increase is augmented by study under improper conditions, lack of proper glasses and etc.

The hypermetropic eye renders study exceedingly difficult, producing tired eyes, headache, nervousness and inability to concentrate the thought. All of this is productive of illiteracy, ignorance and idleness and provide scholars that are a burden to their teachers and a disappointment to their parents, and encourage the swelling of the ranks of the idle, the outcast and even the criminal.

Nasal and throat hypertrophies such as enlarged turbinates, adenoids and tonsils, produce deafness in children (some authorities claiming that 90 % of deafness in children is due to adenoids), who are unable to absorb ordinary education, and frequently have discharging ears, which not only induce deafness and becomes even a menace to life, but necessitates the production of micro-organisms which should exclude such children from school, owing to the liability of infecting other scholars.

Most parents think nothing of a "gathering in the ear"—they seem to think it a mere incident of childhood, as commonplace as the "running nose" or the "dribbling mouth", and after a few drops of sweet oil, pass the case up without further attention. They expect this to occur every winter, and do not stop to think there must be a cause for such a condition, and if that cause is not removed that child will very likely need an ear trumpet before he has reached middle life.

The pity of it all is, that practically all such conditions and many more too numerous to mention could be cared for and cured if detected early in life, and I believe that everyone will agree

that the best time to do this, is when the child enters school and the surest way is to institute systematic examination of all school children.

Up to the present time where-ever this custom has been adopted, the simple examination by school teachers has been the only one to prove successful. and we should certainly favor the adoption of such a method in the schools of Kansas. This can be done, if the Health and Educational authorities will issue separate orders that such examinations shall be made. It is not hard to do, it is not expensive, it is in no way objectionable; and can be easily and effectively accomplished.

To foster child growth in accordance with the laws of his own nature; to treat him as a spiritual entity without sacrificing his physical health; to secure mental attainments through studies which furnish appropriate stimulus to thought; to develop all of the latent forces of body and of mind without unnecessary loss of energy or the arrest or prematurity of development; to condition his school career so that his thinking is quickened and deepened and his vitality augmented—these are some of the elements concerned in the problems of health and education."

It is no disparagement to assert that, when the final history of our time is written, when the relative value of changes and discoveries is estimated rightly, and when the full hopes of the present day efforts are realized, no age will outshine in beneficence the results which are bound to accrue from the union of Health and Education."

VARICOSE VEINS.

DR. N. C. MORROW, Altamont, Kansas.

Read before the South-east Kansas Medical Society, April 11, 1911.

Varicose veins do not often imperil life, nor do they often cause serious illness; never-the-less they deserve our consideration because of their great frequency and because they often make our patients absolutely miserable, unable to enjoy life or even to perform their accustomed duties.

Embryologically, the veins are derived from the same structure as the arteries, the mesoblast, and histologically, are identical with them. They differ from the arteries only in the relative thickness of the various coats, and in the presence of valves in the superficial and some of the deep veins. The intima is identical with that of the arteries and is continuous with them through

the capillaries. This is of considerable importance because the behavior of this coat in the process of repair and regeneration is the same as that of the arteries under the conditions of disease or injury. Also the tendency to thrombosis and embolism is the same whenever the endothelium is injured or irritated. In the superficial veins, especially of the lower extremities, and in some of the deep veins, the intima is reduplicated to form valves.

The media is composed of elastic tissue and involuntary muscle fibres, both of which, however, are very much less abundant than in the arteries. The adventitia is composed almost entirely of white fibrous tissue.

Owing to the thinness of the muscular coat other veins lack that rotundity, elasticity, and contractibility which is so characteristic of the arteries; and they possess the power of a considerable, though limited, distention which never occurs in normal arteries. The total capacity of the venous system is several times greater than that of the arterial. In spite of the thinness of their walls, the veins are relatively as strong as the arteries.

The valves support the blood mechanically, and while they are competent to resist the normal backflow, they are unable to withstand any long, continued pressure which is greater than the normal intravenous tension. This point is of great importance in the formation of varices.

The collateral circulation of the venous system is very free, even more so than that of the arterial, and it is a fact that gangrene very rarely if ever occurs as a result of obstruction of the veins alone.

In considering the cause of varicose veins we must keep in mind always their structure and their function. In the lower extremities the thin-walled dilatable vein must support a column of blood between three and four feet in height. The saphenous veins have practically no external support, and the contractions of the muscles, when they effect the blood flow at all, tend to hinder rather than to hasten it. The valves, as we have already seen, are comparatively frail and unable to withstand any extra strain for any considerable length of time. Not infrequently they are congenitally deficient.

Long continued increase of pressure by forcing the valves may lead to chronic degeneration changes, which destroy the elasticity of the veins and cause a compensatory phlebosclerosis. Or the phlebosclerosis may be the primary rather than the secondary cause. Among the contributory causes the most important are those which cause an increased venous pressure; occupations

that require the standing position; increased intra-abdominal pressure from whatever cause; arterio-sclerosis, which probably acts by exciting a phlebosclerosis, as well as by causing increased pressure, and pregnancy, which has an influence outside of the mere mechanical factor of increasing intra-abdominal pressure. Other causes are nervous diseases which affect vaso-motor control, and chronic phlebitis which causes structural changes in the walls of the veins.

The histological changes, as in arteriosclerosis, are primarily and essentially in the media. There is at first marked hypertrophy of the muscular and elastic elements, which is later followed by atrophy. The walls may be ultimately transformed into fibrous, inelastic tubes which are tortuous and sacculated and adherent to the surrounding structures. The fibrous degeneration extends to the adventitia and intima. The valves become atrophied to mere stumps and in places the proliferation of the intima is so great that the lumen of the vessel is entirely obliterated. The effect of the phlebosclerosis is to lengthen the vein so that it becomes tortuous. Large tortuous veins frequently come in contact with each other and by pressure atrophy becomes perforated and communicate with each other.

The common complications of varicose veins are; 1 rupture, 2 phlebitis and lymphangitis, 3 neuralgia, 4 ulcer. Rupture of the thinned varices if external may cause hemorrhage so profuse as to threaten life, if subcutaneous large ecchymoses or hæmatomata are produced. Phlebitis may be excited by the most trifling injury because of the stagnation of the circulation and the degenerated condition of the walls of the vein. Lymphagitis frequently accompanies phlebitis and adds greatly to the severity of the condition.

Neuralgias are often found with varicose veins and are caused by the development of intraneural and perineural varices. An operation for the relief of this form of neuralgia has been devised, which consist in exposing the nerves, dissecting out all recognizable varices and combing the nerve with a coarse brush to destroy all small varices. It is said to have given good results.

By far the most frequent and most important complication is ulcer. It is commonly found on the lower and inner aspect of the leg over or near to the internal saphenous. The skin over the varices, at first thin and hardened, later becomes hypertrophic and oedematous and an easy prey to the slightest infection. And when infection once occurs, healing is very slow.

Let us now consider the treatment of this condition. There

are of course certain cases where radical operation is contra-indicated, because of various constitutional disease—nephritis, cardiac insufficiency, diabetes, etc. It is also contra-indicated in cases which have very extensive involvement of the skin, so that operation would require the excision of a great amount of skin; and in cases in which the deep veins also are varicosed or have been obliterated by a previous thrombo-phlebitis. In all these cases the proper care of the limbs combined with a suitable form of external support, will afford no little relief to the patient. We have seen that increased intra-venous tension is the chief cause of this condition, so it is important to do away with any condition that tends to increase tension. Occupations that require standing for long periods are to be avoided, garters or other constricting garments must be discarded, but our main reliance is to be put in properly fitted elastic stockings. They must always be made to extend from the foot to a point above the enlarged veins. They are to be fitted after the foot had been elevated for some time, so that all swelling is gone from the leg.

The only curative treatment for this condition, however, is operative. The results of operative procedures in these cases, if properly performed, are most satisfactory and the mortality should be practically nothing. Of course there is some danger of embolism, but the emboli are non-septic and are of minor significance. All operations for this condition may be divided into four classes: 1. Ligature of the varicose trunks; 2. linear section of the varicose trunks by circumferential or spiral incisions; 3. subcutaneous resection of the affected veins; 4. open resection of the veins and their tributaries. They all aim to the destruction of the diseased and incompetent venous trunk, and the forcing of the blood through the deeper veins.

Obviously if the deeper veins are varicosed or obliterated the operation will be a failure. The first class of operations, ligature of the varicosed trunk, are palliative rather than curative and are to be used where more extensive operations are contra-indicated. One or more ligatures are placed along the course of the vein through small transverse incisions. The operation is done under local anesthesia, and in some cases gives most gratifying results.

The second class, linear section of the vein and its tributaries by circumferential or spiral incision aims to destroy the continuity of all the affected veins. However, it is found that the percentage of cures from this operation is small. Moreover, division of the cutaneous nerves leads to paræsthesias and because of the destruction of the lymphatics the œdema persists in the foot.

The third class, subcutaneous resection, has been best developed by Charles Mayo. He uses an instrument called an enucleator, which consists of a fourth inch ($\frac{1}{4}$) steel ring set on a long handle. The vein being exposed by a short transverse incision and cut between ligatures the end to be removed is threaded through the enucleator; then by a gentle pushing force, the vein being held to make tension, the instrument is forced down along the vein six or eight inches tearing off the lateral branches as it goes. The point of the instrument is then forced against the skin and a small incision made down to it, when the ring is pushed through the opening. The loop of vein thus freed is removed from the wound and from the instrument; the instrument is removed from the wound and rethreaded on the vein and the process repeated till as much of the vein as desired has been removed.

The fourth class, open resection, is to be used when, because of extreme tortuosity, calcareous deposits, or extensive adhesions to surrounding tissues the subcutaneous method is impractical. Any length of vein deemed necessary may be removed by this method. The great objection to it being the extensive and unsightly scars that are left.

Varicose ulcers are most unsatisfactory to treat unless the veins are removed at the same time. But they can usually be easily cured at the time the varicose veins are removed. The entire ulcer should be excised and the denuded area covered with skin-grafts. The grafts may then be left exposed to air, according to Mayo's method, or they may be covered with a heavy gauze dressing which is not disturbed for several days, till the grafts have taken. The latter method gives the best results provided a clean operation has been done.

In conclusion, let me say that every patient suffering with varicose veins should be submitted to operation if possible. Palliative measures are unsatisfactory at best; while radical operative procedures, if judiciously chosen and skillfully done, give the most gratifying results.

DIAGNOSIS AND TREATMENT OF GASTRIC ULCER.

DR. P. T. BOHAN, Kansas City, Mo.

Read before the South-east Kansas Medical Society, April, 11, 1911.

Ulcer of the stomach or duodenum is a vastly more common condition than we have been led to suppose. Combined statistics from over 5000 autopsies shows ulcer or scars from healed ulcer

in a little over 4% of cases, yet ulcer is diagnosticated clinically in less than half this number, which can mean only one of two things—either ulcer is often latent, or what is more probable, our methods of diagnosis are faulty. Codman states it as his conviction that a peptic ulcer is almost as frequent as acute appendicitis. Statistics from the operating room by such men as Deaver, Monahan, and the Mayo's prove conclusively that many cases thought to be some form of nervous dyspepsia by the gastroenterologists have an organic background in the form of an ulcer of the stomach or duodenum.

Not only the occasional death that occurs from hemorrhage or perforation and the possibility of malignant degeneration, but the serious consequences of the numerous complications, such as starvation due to pyloric stenosis or perigastric adhesions, tuberculosis from malnutrition and anæmia and the various neuroses from the chronic source of irritation, justifies a more careful consideration of the symptom complex of ulcer than it has been given in the past.

According to statistics, 25% of the cases where ulcers or scars are found at autopsy, the patient had had no symptoms during life. We also read reports of cases where the first ulcer symptom was hemorrhage or perforation. I do not believe that many cases of ulcer are latent. I have seen a few cases of perforation and of hemorrhage in patients that had never consulted a physician for stomach trouble and at first denied ever having had more than a few dyspeptic symptoms, but a careful history never failed to elicit fairly typical ulcer symptoms.

Diagnosis.—There are three cardinal signs of ulcer, viz., hyperchlorhydria, hemorrhage and pain.

Hyperchlorhydria.—This is present in only about $\frac{1}{3}$ of the cases. As neurosis reflex nervous dyspepsia, especially in appendicitis and gall-stones, constipation and many other conditions cause an excess of hydrochloric acid, it cannot be considered a very valuable sign of ulcer. It is not so much the excess of the acid as its presence that is of diagnostic value. Although reliable authorities claim that ulcer may be present with anacidity, the cases are extremely rare. With the symptom complex of ulcer and no free hydrochloric acid, I would so strongly suspect malignancy that I would urge an immediate operation.

Hemorrhage.—About 25% of ulcer cases vomit blood. Occult blood is found in the stools in about 70% of cases. The clinical test for occult blood is so delicate (one mg. of blood to one gm. of stool giving the reaction) and the source of the blood may-

be any place between the nose and the rectum that this test, even when positive, doesn't mean very much.

Pain.—If only 70% of ulcer cases have the unreliable sign of occult blood in the stools, if only 25% have hematemesis, and if only 35% have hyperchlorhydria, it is very evident in order to diagnose more than $\frac{1}{2}$ of the cases that we have to rely on some other symptom. According to Linden, 90% of ulcer cases have pain. In 265 cases analyzed by Fenwick pain was present in 100%. From my experience I must agree with the latter authority. I have never yet seen a case that I thought was ulcer that did not give a history of pain, nor have I ever seen a patient with perforation or hemorrhage due to ulcer, from whom a history of pain could not be obtained. From a diagnostic standpoint it is of no material difference whether there are sensory nerves in the floor of the ulcer or not, or whether the pain is due to spasm of the muscular wall of the antrum pyloricum or a lymphangitis in the peritoneum, the practical fact remains that the pain occurs when hydrochloric acid is free in the gastric juice and subsides when the acid is neutralized by alkalies or is combined with albuminous food. The characteristic pain of ulcer is burning, gnawing, grinding, or cutting in character. It may radiate toward the nipples the left hypochondrium or left scapula, but very seldom to the right shoulder or right scapula. Although the character of the pain and the region to which it radiates are of extreme importance, more important still is the time that it occurs. Most patients are free from pain in the morning before breakfast. The pain comes on 15 minutes to two hours after breakfast and lasts until after the stomach empties itself. It may come on again a while before the midday meal on account of hunger or the thoughts of food exciting the secretion of hydrochloric acid, and this hunger pain is rightly considered by some to be almost pathognomonic of ulcer. This hunger pain is relieved for a time by the midday meal, but recurs again in the afternoon, usually more severe than in the forenoon, probably due to a heavier meal being eaten at noon than in the morning. Probably the most characteristic ulcer pain is the pain that comes on at night. When a patient frequently gets out of bed during the middle of the night and takes a dose of soda or a glass of milk to relieve a gnawing sensation in the stomach, it is a most valuable symptom of ulcer. Monahan makes a diagnosis of ulcer from this one symptom alone. Pain is usually worse when standing or walking about than when lying down and is sometimes worse when lying on the right side than on the left. Vomiting always relieves the burning pain of ulcer, but seldom

the pain due to cholecystitis. Pain may be aggravated by eating rough vegetables or acid fruits, but this is not a symptom of much value.

Very few patients when left to tell their own story will give a typical ulcer history. To them the fullness, heaviness, weight and belching that are only symptoms of the hydrochloric acid irritating the mucous membrane are more important than the little gnawing hunger pain, which to us means so much. It is only by a careful analysis of the history, which in some cases may take an hour or two, and by picking out little fragments of importance from a mass of confused and disconnected statements, that we are able to build up an ulcer symptom complex. Second in importance to the subjective symptom of pain, are the points of localized tenderness. The point of tenderness in front is fairly constant, distinctly localized about the size of a nickel or a quarter, and situated about two inches below the xiphoid cartilage either in the median line or a little to the left. On the left side behind about an inch from the spine, and between the ninth and twelfth dorsal vertebræ, is another area of tenderness which is of about the same diagnostic value as the tenderness in front.

Other symptoms that are sometimes present and of the same diagnostic value, if associated with the typical history of pain are vomiting, anæmia, good appetite, heartburn, and constipation. Without the history of pain I would never diagnose an ulcer, but with the typical pain and localized points of tenderness and the presence of free hydrochloric acid, I would diagnose an ulcer if all other symptoms were absent.

Differential Diagnosis.—So many conditions cause stomach symptoms or pain in the epigastrium that a number of things have to be considered in the differential diagnosis. The history of a patient with nervous dyspepsia may so closely simulate that of ulcer that the diagnosis is most difficult, and at times, in order to be on the safe side, it may be necessary to give the patient the ulcer treatment for a week or two as a therapeutic test. The commonest symptoms in nervous dyspepsia is the belching of gas, not only immediately after eating, but sometimes while eating. When a patient complains of nothing but belching of gas, the chances are that the trouble is a nervous dyspepsia, it certainly is not ulcer. Some neurotics have hyperchlorhydria, which may cause a fullness, heartburn, and discomfort in the stomach at the height of digestion, but they don't have the pain. Monahan states unqualifiedly that persistent hyperchlorhydria is peptic ulcer.

Gall-stone colic may be confused with the neuralgic pains of ulcer. The main features of the pain in biliary colic are its sudden onset, agonizing character, and its periodicity. More confusing perhaps is the pain due to stone in the cystic duct, or cholecystitis and pericholecystitis. In these conditions, the pain is constant, either uninfluenced or aggravated by eating and situated in the right hypochondrium, while the pain due to ulcer is seldom ever felt on the right side.

Cancer.—The age of the patient, the anorexia, the stomach analysis, the signs of motor insufficiency, make the diagnosis easy in most cases. Chronic appendicitis with reflex appendiceal dyspepsia may closely simulate the ulcer syndrome, but usually one can get a history of acute onset, a little tenderness over the appendix, or a slight increase in the leucocytes. Again these two affections may coexist.

Patterson states in the January 14th, number of the *Lancet* that in $\frac{2}{3}$ of the cases in which he had operated for gastric or duodenal ulcer, he also found a diseased appendix.

The diagnosis of the complications of ulcer often depends upon eliciting a previous ulcer syndrome. The most serious complication and the one upon which a life may depend upon an early diagnosis is that of perforation. The history of the following case is typical of this condition.

In Nov. 1910, I was called at 11 p. m., to see Mr. W. who was attending a convention at the Coates House, and was suddenly seized with severe pain in the abdomen. I saw him about ten minutes after the onset of his illness and found him in bed with his legs flexed, abdomen retracted and rigid, and a pinched expression. A couple of minutes after I arrived he vomited a considerable quantity of undigested material that had a very marked alcoholic odor, but it contained no blood. He was complaining of severe pain in the right hypochondrium and loin. The patient stated that he had drunk twelve to fifteen high-balls and smoked about the same number of strong cigars during the day, and was just as sure that his trouble was an attack of acute indigestion as I was that it was not. He insisted that he had never had stomach symptoms of any kind that could not be accounted for by indiscretions in diet or alcoholic-excesses. He finally told me that for five years, he would get out of bed once or twice a week in the middle of the night and take some soda, and that he occasionally had a little burning and gnawing sensation in his stomach between meals. From this history, from the sudden onset of pain in the epigastrium with collapse, and the obliteration of the liver dull-

ness a positive diagnosis of perforated ulcer was made and an immediate operation advised. Four hours from the outset of his illness the patient was operated upon by Dr. Perkins and a perforated ulcer on the anterior wall of the pyloric antrum was found. Except for a rather severe hemorrhage ten days after the operation, the patient made an uninterrupted recovery. Whenever a patient who has had even suspicious ulcer symptoms is suddenly seized with severe pain in the epigastrium or either hypochondrium and the abdominal muscles are rigid, the leucocytus slightly increased and even though the liver dullness is intact, the temperature normal or subnormal, a probable diagnosis of perforated ulcer should be made and the patient operated upon at once.

To wait for positive symptoms of peritonitis before making a diagnosis means a frightfully high mortality, while if the operation is done within six hours, the mortality ought not to exceed 20 %.

Perigastric adhesions are found in five per cent of autopsies and are on the commonest complications of ulcer. The diagnosis of adhesions is not easy and depends upon the history of ulcer symptoms, and constant pain in the epigastrium, that is aggravated by movements of the body, such as bending backwards, elevating the arms to the head, and stooping. Pariser has called attention to pain on elevating the left costal arch as a sign of adhesions, and I have found this to be a symptom of considerable value.

Stenosis of the pylorus due to scar tissue or inflammatory exudate is diagnosed by the symptoms of motor insufficiency, such as peristaltic waves, dilated stomach, retention of food overnight, and increased acidity and sarcinæ in the stomach contents.

Spasm of the pylorus due to ulcer may cause pain, peristaltic waves and retention, but these symptoms subside if the patient is given the proper diet.

Treatment.—There are few conditions with which the internist has to deal that yields so beautifully to scientific treatment as that of peptic ulcer. To undertake the principle on which the dietetic and medicinal is based it is necessary to bear in mind that the only place in the gastro-intestinal tract from the pharynx to the rectum where a round ulcer forms, is between the lower end of the esophagus and the middle portion of the duodenum, i. e., that portion that comes in contact with the gastric juice. We know that ulcer is extremely rare, if it ever occurs when there is no free hydrochloric acid in the gastric juice. Matthes prevented healing of a traumatic gastric ulcer in a dog by irrigation with a 5 % solution of hydrochloric acid. From the fact that ul-

cer occurs only where acid gastric juice flows, that it seldom if ever occurs in anacidity, and that a traumatic ulcer can be prevented from healing by irrigation with a fluid that contains little more free acid than normal gastric juice, suggests strongly to my mind that the main factor in preventing an ulcer from healing is the hydrochloric acid. I have seen at autopsy a number of small round ulcers in the stomach and duodenum when death occurred ten days after a poisonous dose of hydrochloric acid.

Is gastric ulcer a surgical affection? Some surgeons claim that ulcer of the stomach or duodenum is as much a surgical disease as acute appendicitis, less radical ones advise medicinal treatment for the acute ulcers and gastro-enterostomy for the chronic ones. Ulcers heal following gastro-enterostomy because the gastric juice is drained away from the site of the ulcer, but the operation alone does not lessen the secretion of the hydrochloric acid, nor cure the morbid condition of the mucous membrane, the main factors in the causation of ulcer. My personal opinion is that all cases of uncomplicated ulcer, whether acute or chronic, will heal on the proper internal treatment if carried out long enough. An ulcer the size of a dollar on the surface of the body will not completely heal in three weeks, so why should we expect one of the same size in the stomach to do so. If we can prevent free hydrochloric acid in the gastric juice by binding it with albuminous food, neutralizing it with alkalies, and lessening its secretion with belladonna, why shouldn't these ulcers heal? They will!

Cruveilhier, the pioneer in the study of gastric ulcer, was the first to advocate treatment of the condition by the rest cure and an exclusive milk diet. This stood as the standard until Von Leube introduced his method in 1884. It is essentially as follows;

1. Absolute rest in bed for 2 or 3 weeks.
2. Hot flaxseed poultices on the epigastrium.
3. Bismuth medication.
4. Diet, which consists for the first week or ten days of milk, usually boiled, Leube meat solution, and unsweetened zweiback. The next week or ten days in addition to the milk, he gives rice, soup, and eggs. Later, tender meats; and after the fifth week careful ordinary dieting.

Leube has reported up to the present time 627 cases. He claims that 90% were cured, 85% improved, 1% failed to improve, and $\frac{1}{2}$ % died. In cases with hemorrhages, Leube advises "abstinence cure" for a few days, and during this time dependence is placed on rectal feeding. It seems to be pretty well proven by the experiment of Edsall and Miller in this country, and Body

and Robertston in England, that it is doubtful if more than a minute quantity of actual nourishment is absorbed from the rectum. Ewald, who was formerly very enthusiastic over nutrient enemata, now says their only value is in supplying the body with liquid. Schutz, of Vienna, has found nutrient enemata to increase the secretion of gastric juice, a condition to be avoided in the treatment of gastric ulcer.

I am not enthusiastic over rectal feeding in any condition, and certainly would never use it in the treatment of ulcer. In 1904 Leuhartz came forward with his treatment, which with slight modifications, I have found the most satisfactory. His objections to Leube's treatment were the starvation in the early period on the rectal feeding and later the large quantities of milk. The reasons given by Leuhartz for all ulcers not healing without treatment are: 1. The acid in the gastric juice; 2. Mechanical stretching from over distention; 3. Anæmia. The essentials of the Leuhartz's treatment for ulcer are as follows: the patient is kept in bed from 3 to 5 weeks. Most of the time an icebag is kept on the epigastrium to prevent distention of the stomach. The first day the diet consists of one egg stirred in three ounces of milk, and of this mixture the patient sips a tablespoonful every two hours. He adds 3 ounces of milk and one egg daily until the patient is taking 8 eggs and one quart of milk a day. After the first few days, $\frac{1}{2}$ to 1 ounce of sugar is added to the milk, and in the second week scraped raw meat. At the end of two weeks, rice, milk toast, and mashed potatoes are given. Among the benefits of the cure, Leuhartz specially cites: 1. The short duration of treatment; 2. by means of dieting alone the pain was relieved; 3. The vomiting ceased in a few days; 4. The recurrent hemorrhages were for less than by other modes of treatment; 5. The cures are usually permanent.

In cases of hemorrhage feeding is begun by the mouth at once in order to bind the hydrochloric acid and prevent its evil effects on the recent thrombus. Bold as this treatment may seem, statistics and personal experience would indicate that the percentage of cases with recurrent hemorrhage is much less when fed by the mouth, according to Leuhartz, than if given rectal feeding, as advised by Leube.

Of the medicinal remedies used for ulcer, the most important are alkalies, which neutralize the acidity. I usually give seven grains of sodium bicarbonate and three and one half grains of calcined magnesia five times a day, fifteen minutes after taking nourishment. Bismuth is a popular remedy, and Fleiner recom-

mends giving it in large doses through the stomach tube. When used on an ulcer on the surface of the body, it forms a dry, adherent crust, and it has been demonstrated at autopsy to do the same thing on a gastric ulcer, which would naturally interfere with the healing process. Bismuth may be given for a few days for pain, but should not be given to promote healing of the ulcer, because it probably lessens it.

Silver nitrate lessens the hyperæsthesia of the mucous membrane of the stomach, but it increases the acid, and probably has little or no effect in stimulating granulations.

Paul Cohnheim recommends one ounce of olive oil 3 times a day before taking nourishment. He claims that it soothes and protects the ulcer, lessens the secretion of acid, and possesses considerable caloric value. I have used olive oil in the treatment of ulcer a number of times, and the results lead me to believe that the claims for it by Cohnheim are correct. Probably the most brilliant results are obtained from it in cases where the ulcer is close to the pyloric ring and causes pyloric spasm, which is manifested by peristaltic waves.

Surgical Indications.—Such complications of ulcer as adhesions, perforation or cicatricial stenosis of the pylorus are positive indications for surgery. Hemorrhage is not. Deaver stopped operating for gastric hemorrhage four or five years ago. If given a hypodermic injection of morphine and an ice bag placed on the abdomen, few patients will bleed to death, if operated upon, the mortality is high, and the bleeding vessel is seldom found.

That all cases of acute ulcer are medical, is the consensus of opinion of both medical men and surgeons; whether all cases of chronic ulcer are surgical is a mooted question.

The results following gastro-enterostomy are sufficiently satisfactory to justify the operation, if patients prefer that method of treatment. But unless combined with the medical treatment, recurrence will be greater than after the medical treatment alone.

Before advising operation on these cases, it should be remembered that gastro-enterostomy by the most skillful surgeons in this country, has a legitimate mortality of about 2%. By the average surgeon, who does not exceed one half dozen of these operations in a year, the mortality is at least 10%.

In 627 cases given the medical treatment by Leube, the mortality was one half per cent.

The cases of chronic uncomplicated ulcer that can't be cured by the Leuhartz diet if given properly and carried out long enough are extremely few—I have never seen any.

In obscure cases I have used the Leuhartz diet to test the diagnosis. If most of the symptoms have not subsided at the end of two weeks, I feel sure that the diagnosis is wrong, or there is some complication. Twice in the last six months, because the symptoms were not relieved at the end of two weeks, I suspected complication and advised operation, and found that one case was complicated by appendicitis and the other by perigastric adhesions.

POST-OPERATIVE THROMBOSIS AND NEURITIS.
With Report of Case.

ST. CLOUD COOPER, M. D., Fort Smith, Arkansas.

Read before the South-west Medical Association, Oct. 11, 1910.

Any post-operative trouble after a successful laparotomy is a worry to the surgeon.

Thrombosis of the veins of the lower extremities is met with often enough as a post-operative complication after gynecological operations as to merit our attention and to cause us to look about for means and methods to prevent it.

G. B. Miller in his article on Complications Following Operations in Kelly-Noble Gynecology and Abdominal Surgery says: "Schenck states that after 7130 gynecological operations in the Johns Hopkins Hospital there occurred 48 cases of thrombosis of the veins of the lower extremities.

"Hoffmier reports 6 cases following 389 operations for myoma.

"Albanus found that in 1140 laparotomies in the New General Hospital at Hamburg-Eppendorf there occurred 53 cases.

"Sonnenburg in 1000 operations for appendicitis observed 20 cases.

"Clark in 3000 celiotomies performed mainly for gynecologic diseases found 35 cases of femoral thrombosis."

Thrombosis while a troublesome complication, is not always a serious one. There is always a possibility of every thrombus becoming an embolus, and for this reason every case of thrombosis should be handled with extreme care.

It is said to be most likely to occur between the 10 and 20th day. Debilitated and anæmic subjects and those who have suffered from prolonged uterine hemorrhages due to submucous fibroids are the ones most likely to suffer from this complication after operation. Bland-Sutton believes that sepsis is the sole cause of the formation of the thrombi in the great veins and that thrombosis is in reality a defensive action of the blood. He in-

sists on the most painstaking care in preparation of the ligature material and the use of sterilized rubber gloves over thoroughly washed hands in all pelvic operations.

The proper observance of the surgeon of the normal conditions within the abdomen and a striving to create them as far as possible by his operations, is a safeguard against the possibility of thrombosis. We are told that as long as a blood clot forming in the broad ligament after pelvic operations remain sterile, there is no cause for trouble; but becoming infected they cause thrombosis.

Symptoms.—Pain in the calf of the leg. The leg becomes swollen. The infected vessels stand out like whipcords. Numbness and tingling in foot and toes. Pain is usually so great that morphine is demanded for its relief. The limb becomes cold and white.

In a patient whose physical condition is bad from exhausting disease and loss of blood from uterine myoma it is well to get that patient in as good condition as possible before operation.

During the operation work as rapidly as possible; save as much blood as possible; handle the viscera as little as possible, and depart as little as possible from physiological conditions within the abdomen and at the same time maintaining the body warmth.

After operation the heart's action should be watched and not allowed to grow weak. Elevating the foot of the bed so as to equalize the circulation and to empty the pelvic veins. Fowlers position favors pelvic stasis and if the heart is weak there is slowing of the pelvic circulation, thereby favoring the formation of a thrombus.

Patients position in bed should be frequently changed.

Introduction of fluids into the body by mouth, rectum or subcutaneously.

Sitting up or straining on the bed pan should not be allowed until suitable time has elapsed after operation.

The treatment is rest in bed for at least six weeks. She should be moved as little as possible. No active purgation. Limb wrapped in cotton and kept warm by hot water bags. Foot elevated. After two months gentle massage, electricity and hydrotherapeutic methods.

Report of the Case.—Mrs. B. aged 37 years. Family history unimportant. At the age of eight had inflammatory rheumatism and at twelve had a severe attack of typhoid fever. Was thin and anæmic during childhood. Began to menstruate at sixteen; menstruation lasts for three or four days without pain or discom-

fort out of the ordinary. She is the mother of two children, the youngest now nine years old. Four years ago began to have attacks of diarrhoea which lasted off and on for two years. For the past eighteen months has had but little trouble with bowels. For several years has had hypochlorhydria, for which she has been taking hydrochloric acid after meals.

Present Status.—March 10, 1910, is weak and anæmic. Slightest exertion tires and causes shortness of breath. Has headaches and vertigo. Skin has a pale chalky white appearance. Has a well marked mitral murmur. Lungs negative. Urine negative. Blood examination shows secondary anæmia. For the past three months has suffered from frequent uterine hemorrhages. Lately there has been a bad odor from the uterine discharges. Uterus is enlarged with a depth of five inches. Sloughing submucous fibroid protruding from cervical opening. A number of small fibroid tumors can be made out on posterior and anterior uterine body. She has had a good deal of pelvic pain and does not sleep well. Is nervous and apprehensive.

She was given treatment to build up her general health and on April 3, 1910, entered Sparks Memorial Hospital for operation. Under ether anesthesia a supra-vaginal amputation of the uterus was done. Tubes and ovaries being healthy were left. She was under the anesthetic forty-five minutes. Pulse at beginning of operation 120 and at its conclusion 140. She was put to bed, head elevated and Murphy hot rectal installation started. Pulse continuing weak the head was lowered and strychnia given. She had very little nausea and spent a very good night. After noon of second day complained of distension of upper abdomen and nausea; the stomach was washed out after withdrawing considerable fluid and two ounces of hot olive oil left in the stomach. After this she was quite comfortable and had a good night. Bowels moved during the night. On the fourth afternoon had severe attack of palpitation of the heart which was relieved by a small dose of morphia and digitalis.

On the night of the sixth day she was allowed by the nurse, to hang her left foot over the side of the bed for several minutes, when she awoke she had a severe pain in calf of leg, in the foot and in the popliteal space. The leg was numb and she complained of a burning and tingling sensation in foot and toes.

The pain was so severe she was given morphine for its relief. Leg was wrapped in cotton and hot water bottles applied. Next day on looking at the leg large blisters had formed on the heel, ball of great toe and on outer planter surface near little toe.

Still complained of pain and numbness of foot and leg. Sensation of foot gone. No swelling of foot or leg. Motion of toes gone.

On third day of onset of this trouble she began to have great pain along the course of the sciatic nerve for which she was given deep injections of alcohol in the nerve. This was repeated for several days following, with relief to this particular pain.

She required a daily dose of morphine for the pain in leg and foot. At the beginning of this complication she had a degree or so of evening temperature which continued for about three weeks. The foot remained colder than its fellow but not swollen. By the end of a month the blisters had dried up and when removed their sites showed distinct loss of substance. About this time she had another severe attack of pain followed by blisters at the same places as before; they ran the same aseptic course with further loss of tissue. On deep pressure on the inner and outer side of the leg there could be felt hardened veins or nerves, which caused pain and tingling in the foot when touched.

The pain and numb feeling gradually grew less, the motion and sensation in the toes gradually returned. Five months after the onset of these symptoms she still has some pain and numbness of the foot but is up and going about. Has gained in strength, weighs more than she ever did before.

I am satisfied that I had a neuritis as well as a thrombosis to deal with in this case.

The woman weakened by uterine hemorrhages, with diseased heart and bad digestion was one who would be likely to suffer from thrombosis after a pelvic operation.

ANKYLOSTOMIASIS.

Uncinariasis, Hook-Worm Disease, Miners Anaemia, Egyptian Chlorosis.

DR. F. W. TRETBAR, Stafford, Kansas.

Read before the Stafford County Medical Society, April 20, 1911.

This disease is the Hook-worm invasion of the small intestine of man.

History.—In 1843 Dubini first described the Hook-worm in man. It was demonstrated in connection with Egyptian Chlorosis. Sandwith states it is mentioned by the Egyptian writers between 3000 and 4000 years ago. It was described in Tunnel workers at St. Gothards and was recognized more or less from this time on.

Incidence.—The parasite is spread in Tropical and Subtropical Countries and is one of the most fatal of all parasitic diseases. In Porto Rico in 1903 among a total of 23,433 deaths, 5,736 were from anæmia, practically all due to Hook-worm. It was not until the Spanish-American war that the interest in the disease was aroused in the United States.

Reports of cases were published in 1901 and 1902, and in 1902 Dr. Stiles took up the study and demonstrated the fact that the disease was endemic in many places, and was the cause of the common anæmia in the Southern States. It has been found to some extent among the miners of Pennsylvania, in the Philippines, Germany and Austria-Hungary. During 1903, 3,000 patients were treated in the Bochum hospital for ankylostomiasis. In England among the Cornish miners, the anæmia is due to ankylostoma. In Egypt it is very prevalent.

Parasite.—The worm is a *strangylus*, closely related to the *sclerastoma* causing verminous aneurism and colic in the horse, and to the gapeworm of fowls. There are two forms causing disease in man, Old World *ankylostoma duodenale* and the New World *uncinaria Americana*, described by Stiles. The parasites have the same general characteristics; the male measure from 7 to 11mm. in length and the female 10 to 18 mm.

The American worm is the larger. The mouth is provided with heavy sharp teeth with which they pierce the mucosa of the bowel, and by means of a strong muscular oesophagus suck the blood. The eggs are about 65 by 38 microns in the American and somewhat smaller in the European. They are laid in segmentation, forming very characteristic bodies in the faeces. The embryo lives in water or moist ground. The larvæ may live for months in the mud and water of mines. It may be taken in with the water or from the dirt on the hands of the miners, or in the soil deliberately eaten by the earth eaters, of the South. The embryo may enter the skin and be carried by the blood stream.

The adult worm lives in the small intestine, chiefly in the jejunum, but may be found in the duodenum or colon, rarely in the stomach.

Symptoms.—Constant drain on system by sucking of blood; loss of blood into bowel through the bites. A large number however must be present to cause symptoms. Several writers group these cases into mild, medium and severe. At beginning of stage of incubation there may be gastrointestinal irritation and perhaps fever. In advanced stages the anæmia is the most marked symptom. The skin is dirty, muddy at times waxy. In

the South it is known as the "Florida Complexion." There is a lack of lustre in the eyes and a dull expression. Children are stunted and ill developed. As the anæmia advances, the spleen and liver also enlarge, and there is an effusion into the abdomen, so that there is a pot bellied condition. Oedema of the feet is not uncommon. There is usually palpitation of the heart, cardiac bruits and shortness of breath.

Diagnosis.—This is very simple, examine the stools after the use of thymol. Stiles states that the blotting paper test is very good where a microscopical test cannot be made. A portion of fæces placed on white blotting paper leaves a red stain suggestive of blood, after standing an hour.

Prophylaxis.—Prophylaxis of this disease consists of the enforcing of all our sanitary and hygiene laws. And especially those pertaining to the destruction of the worm and egg, by using antiseptics. Also properly constructed outhouses, so that flies, mosquitoes and other insects may not become infection carriers. Infection is most common in summer, most prevalent among whites. Miners should be examined, and their closet accommodations in their mines should be increased and brought to a higher standard of perfection. This later suggestion has been followed in the mines of Austria-Hungary with a marked increased earning ability per man.

Prognosis.—Is good except in advanced cases of anæmia.

Treatment. This consists of preliminary dieting or starving for a few days. Then give one half ounce epsom salt at bed time, repeat this in the morning, followed in two hours with one dram of thymol in capsules. After waiting two hours another half ounce epsom salt is given.

Some recommend one dram of thymol in 24 hours, taken in whiskey. In debilitated persons smaller doses may be given over a longer period of time.

Report of a Case of Hook-Worm.—Mr. C. R., white; American, was born Sept. 2, 1891, near Greenville, Tenn.

Family History.—Father died of tuberculosis at 52-3 years was sick 5 or 6 months.

Fathers' father died of senility.

Fathers' mother died at 76 years, probably senility.

Mother was 31 or 32 years of age at death, tuberculosis cause.

Mothers' father died at age 76, probably senility.

Mothers' mother died at age of 65 or 70 years probably senility.

Personal History.—Is not of any unusual consequence. Has had pertussis, mumps and la grippe. Early in life he says he

had sores on the neck, which afterward ruptured and discharged. He says the Doctor called this scrofula which is probably correct. He has two brothers and two sisters living and well. One infant sister died of diphtheria.

Symptoms. Patient complains of severe weakness, and extreme exhaustion on the slightest exertion, shortness of breath especially after ascending a flight of stairs. His appetite is fairly good somewhat changeable, sleeps about 14 to 16 hours every day. He says he has been feeling poorly for four or five years, gradually getting worse.

He has constant tenderness over epigastrium, at times painful. The urine seems about normal in amount and quality. Nothing abnormal was found with stomach or liver. Feet legs and abdomen are oedematous. In the beginning I thought I could elicit some symptoms of fluid in the peritoneal cavity. The evening temperature for the last two weeks averaged about 100 degrees Fahrenheit, the average pulse about 96. The heart area of dullness is enlarged, and have a regurgitation of the left auriculoventricular valve.

Diagnosis.—Owing to the fact that several of his ancestors died of tuberculosis, first of all might arise in ones mind the thought of that disease. On this account I used the tuberculine ointment test, which with the other clinical findings proved negative. Next the history of his southern origin and the very unsanitary existence in that part of the South, led me to make a diagnosis of anæmia probably caused by the hook-worm.

Treatment. This consisted of doing without supper, two tablespoonfuls of epsom salt, at bed time. For breakfast two more tablespoonfuls of salts. At 10 a. m., twenty grains of thymol in capsule with plenty of water. At 12 a. m., twenty grains of thymol followed in two hours with another large dose of salts. At 4:00 p. m., he received the last dose of twenty grains of thymol and this was again followed in two hours with a large dose of salts. The last dose of salts being vomited was followed in two hours more with one tablespoonful of salts.

Findings.—The first three quarts of fecal matter revealed nothing of a definite nature. The last two quarts, after being filtered through a thin white cloth showed many worms.

Treatment for the anæmia, pepto mangan (Gude') one dram in a glass of milk four times daily. For the heart digitalis and strophanthus in tablet form, and laxatives as needed, also as much fresh air and sunshine as possible with a moderate amount of daily exercise.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY,**EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

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The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1905, it incorporated the Wyandotte County Medical Journal, owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

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EDITORIAL

It is two per cent genius and ninety-eight per cent honest effort that brings about success in any line of work.—Thomas A. Edison.

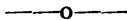
Those who are constantly lamenting their ill luck are often, in some way or other, reaping the consequences of their own neglect, mismanagement, improvidence or want of application.—Marshall Field.

One criticism might be offered some of the authors of papers and that is no one should have his name printed on the program who has not sent in the title of his address. It would seem that since the program does not appear until a week or ten days before the meeting everyone who is to present a paper has it written at that time and it is simply negligence that the secretary is not notified.

Our President.—J. T. Axtell was born near Galesburgh, Illinois, and graduated at the Garnett high school, Garnett, Kansas. He spent two years in the medical department of the University of Michigan, and practiced at Hunnewell, Kansas, under the state board law in force at that time, graduated from Bellevue Hospital Medical College of New York City in 1883, and has practiced medicine constantly in Newton every since. In 1886 he spent six months in the post graduate schools in New York City and Phila-

delphia, and in February, 1887, established the Axtell Hospital at Newton, Kansas, which has since that time been under his charge. For eight years he held the position of Professor of Orthopedic Surgery in the college of Physicians and Surgeons in Kansas City, Kansas. For the last fifteen years his practice has been limited to surgery and consultation.

Dr. Axtell is an enthusiastic alfalfa raiser and a lover of fine stock, especially fine horses, of which he always has a herd. He has always been prominent in the public affairs of his town and county. He is well known among the profession of the State and is held in high esteem. He has always stood for everything that is best in the practice of medicine and his election as president is a fitting honor rounding out a successful career.



The annual meeting of the Society just held at Kansas City was fully up to expectations. While the attendance was not up to the mark established at the last meeting held in Kansas City the meeting in other respects were better. The scientific program was of exceptional interest partly owing to the fact that three guests, two from St. Louis and one from Chicago delivered addresses on topics of great interest. Dr. Wm. Engleback presented the subject "The Diagnosis of Chest Diseases" and illustrated his talk with lantern slides. Dr. H. W. Woodruff presented the subject "Injuries to the Eye," supplemented with drawings of great merit. Dr. Bransford Lewis presented the subject "The Modern Cystoscope" and demonstrated its use. Dr. O. P. Davis delivered the President's Address his subject being "The Physical Supervision of the School Child." His address was well received and showed much care in its preparation and a thorough knowledge of the subject. The meeting place, Masonic Temple, could not be improved upon, and our thanks are due the Scottish Rites Bodies for allowing us its use. The invitation of Hutchinson to hold the meeting there in 1912 was accepted. The following officers were elected: President, Dr. J. T. Axtell, Newton; 1st Vice-President, Dr. H. G. Welsh, Hutchinson; 2nd Vice-President, Dr. G. M. Gray, Kansas City; 3rd Vice-President, Dr. G. W. Anderson, Beverley; Secretary, Dr. Chas. S. Huffman, Columbus; Treasurer, Dr. L. H. Munn, Topeka; Delegates to A. M. A., Dr. O. P. Davis, Topeka, 2 years; Dr. M. Trueheart, Sterling, 1 year.; Councillors: Fourth Dist, Dr. W. E. McVey, Topeka; Fifth District, Dr. W. E. Currie, Sterling; Ninth District, Dr. C. S. Kenney, Norton.

Public Health and Medical Legislation.—The attitude of the last Legislature toward Public Health and Medical Legislation was such as to warrant the conclusion that the Medical Profession of this State will have to get into politics if they are to have just recognition along side the commercial interests of the State.

In the opening week of the Legislature the House declared an emergency and voted \$3,000 for hog cholera serum, for it was said that there were a number of sick hogs at various places throughout the state that needed immediate attention or they might die. Yet, the budget of the State Board of Health, which is working in the interest of the welfare of the "folks" was cut \$19,200 from the amount asked; and which was actually necessary in order to carry forward the work with efficiency and expedition. An appeal for an increase in our emergency fund, in order that the State Board of Health might provide the various serums and antitoxin treatment for certain infectious diseases, and might continue the investigation of infantile paralysis, and be ready to cope with the Asiatic Cholera, which is now threatening both sea coasts of the country, was of no avail. Not only there was no emergency declared, but our prayers were unheeded.

It appeared that every bill of Public Health or Medical character was bitterly opposed in the House, and most of such bills defeated; the only exception being that of the Bill for a State Tuberculosis Sanatorium. The amount appropriated for this institution however was so small as to build and equip a mere pretext of an institution as compared with such as the State really needs.

The appropriation for the Division of Foods and Drugs was cut to such an extent as will seriously cripple the work for the coming two years. And this notwithstanding the fact that the Department stood ready to prove to any unbiased committee that through this division of the Board's work they are saving to the consumers of the State something over \$1,000,000 annually.

The appropriation for the Medical Department of the University was stricken from the budget and there was considerable talk heard about the State House that the entire school should be abolished.

Christian Scientists and their sympathizers, as well as champions of Osteopathy and Chiropractors, seem to have a strong hold upon the Legislature. Indeed it is said that one of the strong men on the Ways and Means Committee of the House was of Christian Science faith; and it is but natural to expect that he would be opposed to legislation of this character.

Aside from the Tuberculosis Sanatorium Bill, the only other

Bill that was passed, in which the State Board of Health was interested, was the Standard Registration of Vital Statistics Act. But here again the enemies of Medical Legislation got in their work and the Bill was so mutilated in the Senate, and the appropriation for making it effective was so crippled in the House, as to make it impossible of enforcement; so, in all likelihood, there will be no Vital Statistics Law during the present Biennium.

Bills providing for a Summer School for Health Officers at the University was defeated, and the bill fixing the remuneration for Health Officers was likewise slaughtered.

There were three bills passed by the Legislature providing for hospital treatment, at the University Hospital, for certain classes of patients; but it is problematical whether these bills can be made effective under the present Hospital facilities of the University Medical School.

Amendments to the Medical Practice Act, and the State Pharmacy Law suffered defeat and a Bill calculated to emasculate the Food and Drugs Act came very near of passage.

All of the above facts are ample to again warrant the observation that the Physicians of Kansas will have to organize themselves and get into politics if they are to come to their own.

S. J. CRUMBINE.

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NOTES OF THE STATE MEETING.

The attendance, while not up to the standard set at the last meeting in Kansas City was good. Two hundred and thirty members signed the registration book.

The President's Address on "The Physical Supervision of the School Child" was of a great deal of interest. It will appear in full in the June issue.

The committee provided more automobiles than there were visiting ladies to occupy them. The ride was over the boulevards and it seemingly made a hit with the ladies.

The banquet was held on Thursday evening at the Masonic Temple and as for responses to the toasts has not been excelled. Toasts were responded to by Dr. M. L. Perry, Dr. C. C. Goddard, Dr. Bransford Lewis, Hon. Henry Dean and Senator Hodges.

A stenographer was employed to take down the discussions and it will again be attempted to publish them. However, after listening to the way in which many of the members almost whispered their remarks it does not look very promising.

The invitation of Hutchinson to hold the next meeting there was accepted. With ample hotel facilities Hutchinson can take care of the meeting as well as any city in the state.

The proceedings of the House of Delegates will appear in full in the June issue.

Dr. H. W. Woodruff and Dr. R. J. Tivnen of Chicago, held an eye clinic at Bethany Hospital on Friday. The cases operated upon were three cases of the tucking operation for strabismus, one tear sac extirpation for chronic dacryocystitis, and one Hotz operation for entropion.

SOCIETY NOTES.

The Missouri State Medical Society held its annual meeting at Kansas City, May 16-18.

The Wyandotte Medical Society held its last meeting before the summer vacation May 23rd.

Golden Belt Physicians Meet.—At the annual meeting of the Golden Belt Medical Society, held in Salina, April 6, Dr. Leonard S. Steadman, Junction City, was elected president, Dr. R. C. Lowman, Kansas City, vice-president; Dr. L. O. Nordstrom, Salina, secretary; and Dr. John W. Neptune, Salina, treasurer. Dr. John G. Sheldon, Kansas City, Mo., conducted a surgical clinic for the society at St. Barnabas Hospital.

The South East Kansas Medical Society met at Independence, April 11th. About sixty doctors registered, and an exceptionally good program was given. "Appendicitis from a Practical Standpoint," by Dr. William F. Coon, Caney; "Syphilis as Seen and Treated by the General Practitioner," by Dr. G. A. Blasdel, Garnett; "Varicose Veins" Dr. N. C. Morrow, Altamont; "Septic Endometritis, with Report of a Case," Dr. H. H. Brookhart, Scammon; "Vital Statistics," Dr. E. C. Wickersham, Independence; "Arteriosclerosis, with some Suggestions for Prophylaxis," Dr. C. A. Thomas, Edna; "Eyes and Ears of School Children," Dr. Hugh B. Caffey, Pittsburg; "Diagnosis and Treatment of Gastric Ulcer," Dr. P. T. Bohan, Kansas City, Mo.; Short talks were given by Drs. C. L. Smith and W. C. Chaney, of Independence. The visitors were entertained by an automobile ride, and a banquet following the program. The

officers for the ensuing year are: President, Dr. G. A. Blasdel, of Garnett; secretary, Dr. E. A. Miner, of Independence; treasurer, Dr. M. F. Jarrett, of Fort Scott. The next meeting will be held in Parsons.

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The Labette County Society met for their regular monthly session in Dr. Bennett's office in Mound Valley. A number of interesting clinical cases were shown, one of severe burns of the hands and arms being especially interesting. Dr. Henson, of Mound Valley, read a paper on "Burns," drawing on an extensive clinical experience for his material. Dr. Christman, of Parsons, had charge of the discussion for the evening, the subject being "Surgery of the Spine." Following the program the Mound Valley doctors entertained the society at a banquet.

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Below will be found the program for the Summer School of Health Officers and Physicians to be held at the University of Kansas at Lawrence, during the week beginning Monday, June 12th. This School will be open to any local physician in the State as well as Health Officers and the Secretary of the State Board of Health, Dr. S. J. Crumbine, extends a cordial invitation to all to attend.

Monday, June 12—4 P. M., Registration of Health Officers and Physicians; Frazier Hall, University of Kansas, Lawrence.; 4:30 P. M., Annual Meeting of State Board of Health and County and Municipal Health Officers; 8 P. M., Formal opening Summer School for Health Officers, by the Chancellor, Dr. Frank Strong; Address, by Dr. Merwin T. Sudler, Dean University School of Medicine: "The Relation of the School of Medicine to Public Health Work".

Tuesday, June 13—9 to 11 A. M. Bacteriology—Conference: "Microbes." by Dr. W. K. Trimble, Director. Demonstrations: Culture Media—Preparation, clarification, filtration, sterilization, neutralization, etc. Bouillon. Gelatine—Special Media. Agar. Morphology—Microscopic specimens. Cocci, Bacilli, Spirilli, etc., Capsules, Spores, Flagella, etc. 11 to 12 A. M. Chemistry of Water Examinations: Professor E. H. S. Bailey, Director. The Therapeutic Action of Mineral Waters. Conference: "Nature's Nitrogen Cycle." Determination of nitrogen as "Albuminoid" and "Free" ammonia.

1:30 to 2:30 P. M. Public Health Lecture, by Clay W. Coburn, M. D., President State Board of Health. "Preventative Medicine." 2:30 to 5 P. M. Laboratory Exercises: Each student performing himself the matter of the morning's conference and aided by the entire laboratory staff. (Optional.)

5 P. M. Public Health Lecture, by Dr. J. J. Sippy, Secretary State Association of Public Health Officers. "The Health Officer's Duty to secure the Prompt and Implicit Obedience of Every Member of His Community to the Provisions of the Public Health Laws." 8 P. M. Public Health Lecture, illustrated. Clarence E. McClung, Ph. D., Professor of Zoology. "Heredity."

Wednesday, June 14—9 to 11 A. M. Bacteriology. Conference. "Microbic Properties and Products." Professor F. H. Billings, Director. Demonstration: Cultures, Use of loops, straight wire, etc. Inoculation: stab, slant, streak. Growth: aerobic and anaerobic—gas or acid made, etc. Colonies: selection, identification methods, etc. Isolation of a specific germ from mixed growths. 11 to 12 A. M.—Chemistry of Water Examinations, by Professor E. H. S. Bailey, Director. Conference: The Chemical Sanitary Examination of Potable Waters. Demonstrations: Professors C. C. Young. Determination of Nitrites, Nitrates, Chlorine and Oxygen Consumption. 1:30 to 2:30 P. M.—Public Health Lecture. S. J. Crumbine, M. D., Secretary of State Board of Health. "Prompt and Efficient Quarantine; How to Establish and How to Release from a Quarantine." 2:30 to 5 P. M.—Laboratory Exercises: Each student performing himself the matter of the morning's conference and aided by the entire laboratory staff. (Optional). 5 P. M.—Public Health Lecture, by W. J. V. Deacon, Statistician, State Board of Health: "Public Health Laws." 8 P. M.—Public Health Lecture, illustrated, by S. J. Crumbine, M. D., Secretary, State Board of Health: "The Pittsburg Survey." A study of the Sanitary, Social and Industrial Conditions of the Worlds Greatest Industrial Center.

Thursday, June 15 —9 to 11 A. M. Bacteriology—Conference. "Pathogenic Functions of Microbes and Factors which Influence their Action." Professor W. K. Trimble, Director. Demonstrations: Special methods of determination and diagnosis utilized in Bacteriology. Hanging Drop; Motility; Clumping, Widal Test; Pfeiffer's reaction; Idol Test; Fermentation studies. 11—12 A. M.—Bacteriology of Water and Milk Examinations: Professor F. H. Billings, Director. Conference: "The Role of Bacteria in Water and Milk." Totals at 20 and 37 degrees. Acid counts at 37 degrees. Identification of fecal organisms. 1:30 to 2:30 P. M.—Public Health Lecture. Professor Wm. C. Hoad, C. E., Sanitary Engineer State Board of Health. "The Safe Disposal of Excreta and Wastes."

2:30 to 5 P. M.—Conference on Drug Adulterations. Professors, Sayre, Havenhill and Watson. Laboratory demonstrations and

lecture upon adulterated, sophisticated and deteriorated drugs and pharmaceuticals.

5 P. M.—Public Health Lecture. W. J. V. Deacon, Statistician, State Board of Health. "Importance and Utilization of Vital Statistics in Modern Civilization." 8 P. M.—Annual Meeting of the Kansas Association of Public Health Officers.

Friday, June 16.—9 to 11 A. M.—Bacteriology. Conference. "Classification of Microbes; Variability of Form and Function; A typical Bacteria." Professor W. K. Trimble, Director. Demonstrations: Stains—Utilization for identification and for differentiation, double staining Polychromes. Specific stains for Spores, Capsules, Flagella, etc. 11 to 12 A. M.—Chemistry of Water Examinations. Professor E. H. S. Bailey, Director. Demonstrations: Professor C. C. Young. The Quality of some City Water Supplies of Kansas. 2:30 to 5 P. M.—Conference on Food Adulteration. Professors Bailey and Jackson, Food Analysts for State Board of Health. Demonstrations in Food Laboratories of Food Adulteration and Sophistication. 5 P. M.—Public Health Lecture. S. J. Crumbine, M. D., Secretary State Board of Health. "Queries and Answers on Public Health Laws, Rules and Regulations and the General Duties of the Public Health Official." Quiz. 8 P. M.—Public Health Lecture. Illustrated. Professor Samuel J. Hunter, Professor of Entomology. "Insect Carriers of Disease."

Saturday, June 17.—9 to 11 A. M.—Bacteriology. Professor W. K. Trimble, Director. Conference. "Vaccination, Serotherapy Immunization, Bacterial Vaccines." Dr. Vernor Nisbet, Director of American Biological Company. Demonstrations. Cultures for Toxin Products, Extraction of Toxins. Preparation and use of killed cultures. Preparation and use of filtered Toxins. Preparation and use of Antitoxin Sera. Preparation and use of precipitated antitoxins. Laboratories open for the completion of individual work throughout the day.

NEWS NOTES

The Journal of the A. M. A. published an interesting issue April 8th, for those interested in automobiles. It contains many valuable suggestions for those who are contemplating making a purchase.

The next regular meeting of the Kansas State Board of Medical Registration and Examination will be held in Mansas City, Kansas, June 13th, 1911.

For Sale.—Five room cottage, dispensing medicine and drugs,

also dispensing outfit and cabinet. Must change climate on account of wife's health. Practice about \$3,000 per year. Collections 95 per cent. \$1,000 buys the above, practice included. Will stay and introduce purchaser. Address NX, care of Journal.

Dr. Benjamin P. Smith, Miltonvale, has succeeded Dr. Chilton W. McLaughlin, Kansas City, as national medical director of the Sons and Daughters of Justice.

New Hospital for Kansas City, Kansas.—The campaign to raise \$200,000 for the new Bethany Hospital to be built on Mount Olivet, Kansas City, was started April 2. The territory included, in this campaign consists of all of Kansas and all of Missouri south of the Missouri river, comprising the St. Louis conference district of the Methodist Episcopal Church.

Honors for Dr. Welch.—Dr. William H. Welch, of Baltimore, professor of pathology at Johns Hopkins University, has been honored by Emperor William of Germany, who has conferred upon him the Crown Order of the Second Class. It is to be delivered in person by the German Ambassador at Washington. Dr. Welch's honors already are many. He has received the degree of Doctor of Medicine from five universities, four of which were German, the honorary degree also being bestowed upon him by the University of Pennsylvania, and six universities and colleges, including Yale and Harvard, have given him the degree of Doctor of Laws.

—New York Medical Journal.

Opposes Contract Practice.—Shawnee County Medical Society, at its April meeting, adopted an amendment providing for the expulsion of any member of the society proved to have engaged in lodge or club practice.

James A. Patton, the Chicago millionaire, has given \$2,000,000 to fight tuberculosis. He has begun a personal campaign of social service, the keynote of which is the donation of \$2,000,000 within the last six months for charities and public works which particularly appeal to him. He has set about financing the biggest war on disease that has ever been known. With an initial gift of \$500,000 to Northwestern University for medical research into the prevention and cure of tuberculosis, it was learned April 12 that this sum is to be increased at once to \$2,000,000, so greatly is Mr. Patten interested in the subject.—Medical Fortnightly.

Robert Koch.—The career of Robert Koch as the discover of the tubercle bacillus is described by S. A. Knopf, New York (Journal A. M. A., May 6), in a eulogistic paper. After a lapse of nearly thirty years since the memorable discovery Knopf says that we can statistically prove beyond the shadow of a doubt that, thanks to the rational, practical yet simple method of prophylaxis which soon followed the discovery of the bacillus of tuberculosis by Robert Koch, the mortality from tuberculosis has been on a steady decrease in nearly all civilized countries. While Koch is generally conceded to have been rather premature in his announcement of the value of tuberculin in the cure of the disease, his original claim has been justified by time and to-day his tuberculin has proved to be a valuable curative in the hands of careful clinicians. His conclusions as to the rarity of the transmission of bovine tuberculosis Knopf thinks were also a little too sweeping. His paper ends with a personal tribute to the character of Robert Koch.

Special Party Returning from California.—A number of those who will attend the meeting of the A. M. A. in Los Angeles in June have expressed a desire to take their return trip through Victoria and Vancouver, and enjoy the scenery of the Canadian Rockies, with short stop-overs at Banff and other notable resorts. For the accommodation of these, the undersigned is making up a party, leaving Los Angeles on Saturday, July 1, stopping at Santa Barbara, San Francisco, Portland, and Seattle, with a daylight boat ride across the sound to Vancouver. From this point the homeward trip will be over the Canadian Pacific Railway through some of the most gorgeous scenery to be found in the world. Stopovers at Rochester, Minn., to visit the Mayo clinic, will be arranged for those who may desire. For full information and itinerary, address Dr. Charles Wood Fassett, secretary, Medical Society of the Missouri Valley, St. Joseph, Mo.

Dr. H. R. St. John, formerly of Alton, Kansas, left May 5th, for Vienna. He will spend two years abroad studying.

It is announced that the public health service at Washington, is about to begin an extended study of goitre to learn the cause of epidemics of the disease now existing in various parts of the country. Dr. John Sundwell, of Chicago, now doing research work at Johns Hopkins University, has been engaged to conduct the investigation.

The Salt Lake route presents one of the most pleasant itineraries, for those who are contemplating attending the meeting of the American Medical Association, at Los Angeles, this year. You can take the U. P. at Kansas City, or any point in Kansas, and then take the D. & R. G., passing over the most picturesque route in America. It seems to us that the accommodations offered by the Salt Lake route have many advantages over the other roads. Anyone desiring information as to this route can obtain the same by writing to the General Passenger Agent of the U. P. R. R. Kansas City.

Obituary.

George M. Covert, M. D., University, of Louisville, Ky., 1873; local surgeon for the Missouri Pacific Railway at Arkansas City, Kansas, and one of the directors of the Arkansas City Hospital, died at his home, April 22, aged 70.

Thomas Hamill, M. D., Eclectic Medical Institute, Cincinnati, 1855; Humboldt Medical College, St. Louis, 1867; Missouri Medical College, St. Louis, 1868; acting assistant surgeon in the army during the civil war; for twenty years a member of the board of pension examiners of Johnson County, Kansas, died at his home in Olathe., March 18, aged 85.

Warren W. Bowles (license, Kansas, 1901); for thirty-five years a practitioner of Bunker Hill, was killed in a runaway accident near Luray, April 5, aged 71.

William Hannah Austin, M. D., Rush Medical College, 1869; for forty years a practitioner of Abilene, Kan.; a surgeon of volunteers during the Civil War; died at his home in Long Beach, Cal., Dec. 22, 1910, from cerebral hemorrhage, aged 73.

Lee R. Ashley, M. D., University Medical College of Kansas City, Mo., 1897; a member of the Kansas Medical Society; died at his home in Pleasanton, February 8, from typhoid fever, aged 38.

Case Reports.

Sodium Cacodylate.—L. W. Crigler, New York, (Journal A. M. A., March 25), reports a case of tertiary syphilis with specially malignant symptoms, including a rapidly progressive ulceration of the

eyelid. Ordinary specific treatment failing to cause immediate improvement, the patient was put on daily injections of sodium cacodylate, grain $\frac{3}{4}$ to a dose. Within forty-eight hours there was marked improvement, the ulcer which had threatened the destruction of the eyelid becoming smooth and healthy in appearance, and within a week the lid had entirely healed with very little deformity. With the exception of two or three of the larger foci situated on subcutaneous bone surfaces near the skin and elbow, there was rapid cicatrization and healing of the lesions. At the end of one week, the injections were discontinued for a week, at the end of which time the Wassermann test had become negative. The treatment was then resumed in $1\frac{1}{2}$ grain doses daily for one week longer, after which the man received three injections weekly for several weeks more. No internal treatment medication was given until the reaction became negative when the tonic doses of iron and strychnia were administered. No bad effects from the arsenic treatment were observed. The author hopes to report future progress of the case.

Potassium Permanganate as a Hemostatic.—L. Buckle, New York (Journal A. M. A., April 29), reports a case of excessive hemorrhage in a Jewish child after the rite of circumcision had been performed on the eighth day after birth, in which the ordinary treatment with styptics failed to control the bleeding. The child became so pale and weak from the loss of blood that its parents took it from the hospital to die at home. Having in a former experience observed the good effects of potassium permanganate in powder when applied to persistent capillary oozing from small cuts, Buckle ventured to use it in this case with the result of immediate checking of the bleeding and no recurrence. The action so promptly of the potassium permanganate was a surprise to him, and, while not enthusiastically recommending it for such cases, thinks the success in this case merits its publication. The child was not a hemophiliac for a deep cut in the forehead caused by a fall, three months later, gave no trouble at all and healed well.

"606" in a Case of Paralytic Dementia.—Dr. Ehlers injected the drug according to the Weschellmann technic. The patient was a man of 40, with paralytic dementia, which had considerably improved under psychiatric treatment, so that he was able to walk and read the papers and understand part of what he read. He had had two apoplectiform attacks previously, one two years and one five weeks before the injection of "606." The injection was not

followed by any local reaction, but progressive symptoms on the part of the nervous system developed, tremor, sweating crises and weakness, and the patient died on the fifth day of progressive heart weakness. No cause for the fatality could be discovered at necropsy except acute parenchymatous degeneration of the organs. —New Jersey Medical Journal.

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Hematoma of the Adrenal Body.—This unusual case is reported by Case (Proc. Path. Soc., Philadelphia, December, 1910, p. 258), in a negress, aged 63, who was admitted to the Philadelphia General Hospital Dec. 29th, 1909, and died Jan. 8, 1910. She suffered, while in the hospital, with mitral regurgitation, aphasia, paralysis of the left arm and incontinence of urine and feces. The most interesting finding at autopsy was the left adrenal which was about the size of a goose egg. It was dark red in color, with here and there patches of yellow, much divided and separated cortex, showing beneath the capsule. This enlargement involved approximately two-thirds of the organ, and was due to a comparatively old hemorrhage into the medulla, with here and there areas of fresh bloodclot. In addition, the microscope revealed a moderate proliferation of connective tissue about the clot, with thickening of the capsule. The kidney was arteriosclerotic and the aorta atheromatous.

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Danger of Prolonged Use of Quinine.—In an excerpt from the Archiv für Hygiene, cited in the Edinburgh Medical Journal, Graziani reports some investigations made by him regarding the possible danger of continuous administration of small quantities of quinine as a prophylactic against malaria. He administered quinine hydrochloride to rabbits and guinea pigs in doses proportional to that used for man in the prophylaxis of malaria. As a result he found that the growth of quinized animals was distinctly impaired as compared with control animals receiving only injections of physiological salt solution. Apart from this interference in growth quinine had apparently little action. It appears from Graziani's experiments that any prolonged use of quinine is by no means an innocuous proceeding, as it may prevent the growth of young animals, and subsequently lower their power of producing immune bodies and of resisting microbic infection.—New York Medical Journal.

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In sprains of the shoulder passive movements are to be resorted to as soon as the swelling and bruising of the parts begins to subside. To postpone these manipulations for more than a few days

is to encourage the formation of adhesions, with resulting stiffness
—International Journal Surgery.

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Pollomyelitis.—J. McW. Berry, Albany, N. Y., (Journal A. M. A., April 8), discusses the methods of treatment of the paralysis following acute poliomyelitis. The electric treatment by the galvanic current is of much more value than that by the faradic, and is of value chiefly in the preservation of the nutrition of the paralyzed muscles until the return of voluntary control. It is useful, therefore, only in the early stages and not after the paralysis has become stationary. The brace treatment is useful in preventing deformity and preventing outstretching of muscles, but mild cases may do better without it and the weight and pressure of the apparatus is damaging in severe ones. In some cases, however, it is essential. Braces should be strong but light and simple as possible. In case of foot-drop a stiff ankle shoe or a brace going up as far as the knee on one side of the leg is enough. In paralysis of the leg, the brace should not be extended to go around the waist unless absolutely necessary, and motion should always be allowed at joints if possible. The operative treatment of paralysis consists in the correction of deformity, tendon or nerve grafting and ankylosing operations; and all of these are sometimes useful. Massage and muscle training are two distinct procedures in treatment but they go well together, the latter supplementing the former. In the earlier stages of the paralysis massage has the advantages of the electrical treatment without its disadvantages and in the late stages of paralysis it is of great value as a preliminary to muscle training. In using it, however, one must remember that the muscles are weak and sensitive and too vigorous massage may be injurious. When the motor cells supplying the muscles are not destroyed but only injured, muscle training comes into play and is the most valuable method. It should not be started as early as massage and only after the acute symptoms have subsided and the muscles have lost their irritability. Too much should not be attempted at first and great care should be taken not to overtire the weakened muscles, and in young children it should be given in the form of play. There is a great temptation to get the patient into braces and to walking too soon. Creeping exercises for a child are useful before actual walking is allowed. The brace treatment should always be supplemented by muscle training which should be employed with the idea of ultimately giving up the brace.

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No. 6

THE MODERN CYSTOSCOPE.

Its Necessity and Practical Utility.

BRANSFORD LEWIS, M. D., B. S., St. Louis.

Professor of Genito-Urinary Surgery, Medical Department of St. Louis University, Genito-Urinary Surgeon to Deaconess' Hospital, City Hospital, Female Hospital, Rebekah Hospital.

Read by Invitation before the Kansas Medical Society, May 4, 1911.

While it is hardly probable at the present day that there are many of the profession who discredit or decry the modern cystoscope, at the same time there are those who are yet unconvinced of its actual necessity in the diagnosis and treatment of genito-urinary affections. Many physicians have done more or less genito-urinary work with, to them, a fair degree of success and satisfaction, who look on the cystoscope as an instrument to which some interest is rightly attached, attractive to read about, but overrated as to its practical utility. Like the members of their profession indigenous to a neighboring state, they have to be "shown."

It seems proper to discuss the subject from three standpoints:

1. The purposes and scope of the cystoscope;
2. Its necessity;
3. Its utility.

The modern cystoscope has three objects to accomplish; it must (a) furnish a good view of the whole interior of the bladder and its contents; (b) permit of catheterization and sounding of the ureters; (c) permit of operative work in the bladder and also in the ureters.

Without going into the history of the subject, it may be said that for the most part, cystoscopes have been built on two plans, the direct and the indirect. The old Brenner instrument was the prototype of the direct plan, in which the observer looks directly forward at the object, without the intervention of any refracting prisms or any bent rays of light. The Nitze was the ancestor of the indirect type, in which the object is viewed at an angle, "around the corner," so to speak, refracting lenses accomplishing this effect.

The "direct" instrument affords a view of the posterior wall and base of the bladder, particularly, and does not enable the observer to see the anterior or lateral walls to advantage; while the "indirect" instrument works off the concavity, shows the sides and anterior wall well but does not permit the observer to look straight forward at the posterior wall. It is obvious that if one wishes to see all parts of the interior of the bladder he must have both forms of the instrument. Anything short of this will of course, be incomplete for cystoscopy, and will be like listening to one lung and ignoring the other when examining for pneumonia. If in possession of only one form of cystoscope an operator might overlook a cancer of the bladder, located in that part of the organ not brought into view by that model of instrument which would be embarrassing to an ambitious cystoscopist, to say the least. A few years ago Schliagntweit added much to the scope and value of cystoscopy, especially in its relation to the broadening field of prostatic surgery, by developing a retrospective cystoscope that gave a full and comprehensive view of the neck of the bladder, of prostatic hypertrophy or outgrowths, etc. This feature of modern cystoscopy has been of the greatest service in the differential diagnosis of obstructions at the vesical neck, and in determining the appropriate mode of securing relief for them.

A feature of the modern cystoscope that has been the means of saving an untold number of lives is that permitting ureteral catheterization and sounding of the ureters (for stone, obstructions, etc.) The Brenner instrument was the first to accomplish this, but Boisseau du Rocher was the first to provide for catheterizations of both ureters at one sitting ("double synchronous catheterization"), which he did in his combination cystoscope of 1889.

Both the direct and the indirect-plan instruments provide for ureteral catheterization; and it is fortunate that they do, because bladders, like the faces of individuals, vary in many respects and markedly so. Some are shallow or flattened in their antero-posterior diameter bringing the ureteral openings

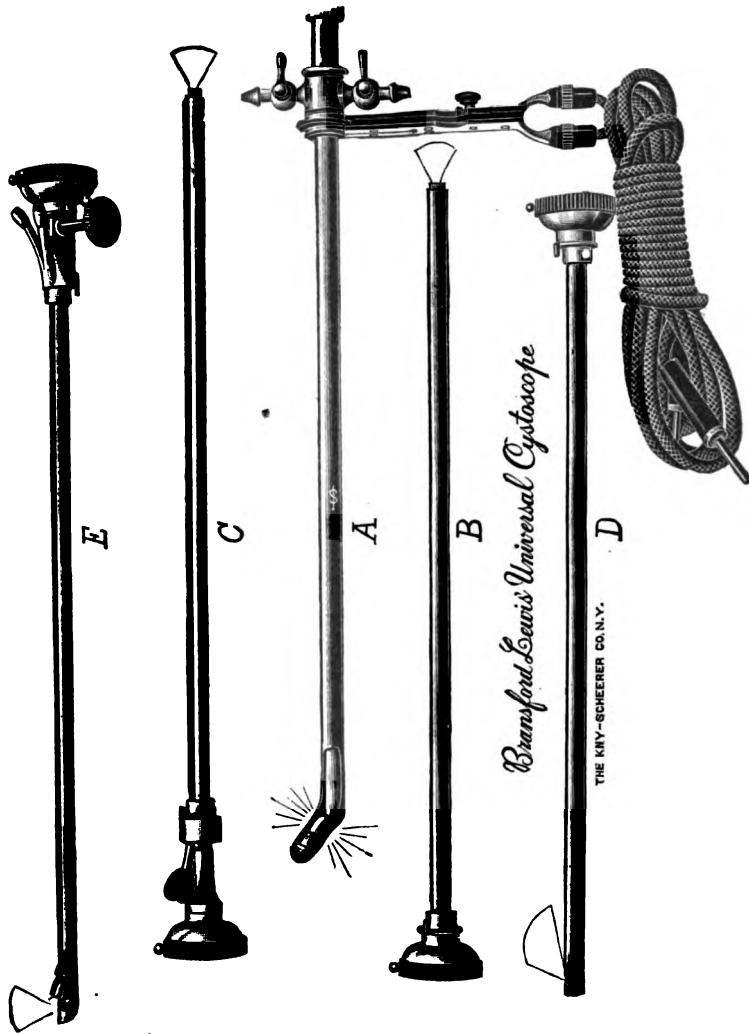
within easy reach of the direct catheterizing instrument, so that the catheters pass directly from the heel of such a cystoscope into the ureteral orifice, and the operation is an easy one. But other bladders are "precipitate" in their posterior contour, and shelve abruptly from the neck into the bas fond, at almost a right-angle or worse thus putting the ureteral orifices out of reach of the direct-view instrument, altogether; and if we had to depend on the direct instrument in such cases we should have to go without the advantage of catheterization. But the indirect instrument provides not only for seeing "around the corner" but for catheterization, also. This is called catheterization by the indirect method. It is the method adopted by the cystoscopes of Nitze, Albarran, Casper and most of the European authors.

In view of the manifold requirements of comprehensive cystoscopy it is evidently desirable to meet these requirements with as small an armementarium as possible. If we have a different instrument to fulfill each of these several purposes we not only find it expensive to provide for them but difficult and troublesome to use them; and the patient becomes an interested party when it is necessary to take one cystoscope after another and introduce new ones each time into his inflamed and tender organ.

To obviate these objections and at the same time meet all the demands of practical, comprehensive cystoscopy, in 1906 I introduced the first model of the instrument which I have the pleasure of showing you to-day—made by the Kay-Scheerer Co., of New York, under the name, the Bransford Lewis Universal Cystoscope.

As you will readily see, it accomplishes the following prime objects: 1. gives a direct, forward view; 2. right-angle view; 3. retrospective view; 4. provides for double synchronous ureteral catheterization by the direct method; 5. the same by the indirect method; 6. provides for free irrigation, both for preliminary cleansing of a foul bladder and for changing the fluid during manipulation, observation or catheterization—in case it becomes bloody or clouded.

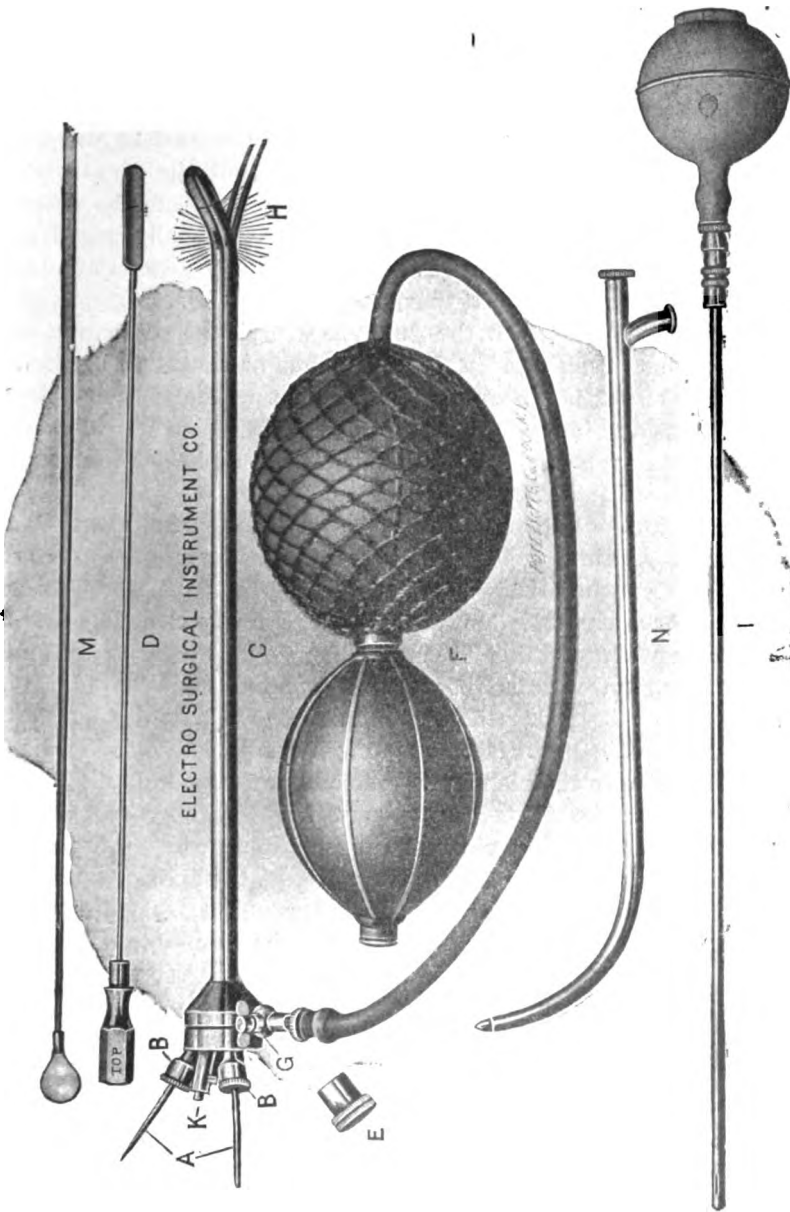
The several telescopes that afford the views and modes of catheterizing are readily put into or taken out of the service sheath which, after being once introduced into the bladder remains there until the completion of the seance; and the changes of telescopes are made without the patient's being aware of it or having cause for complaint. If it is found that one mode of ureteral catheterization is inappropriate for a given case, the



BRANSFORD LEWIS UNIVERSAL CYSTOSCOPE.

other catheterizing telescope, providing the other method, is at hand and may at once be resorted to. This I have repeatedly found necessary in practice, dependent on variations and deviations already mentioned. Sometimes an overhanging prostate is the controlling factor.

Illumination of the whole interior of the bladder is effected by penetrating the beak on both concavity and convexity. The



BRANSFORD LEWIS OPERATIVE CYSTOSCOPE.

lamp is of low tension, generates but little heat and therefore does not burn, even though held in contact with the mucous-membrane for a considerable length of time. The lenses of the telescopes are superb, giving ample field of vision and abundant light. Irrigation is carried on through the little cocks near the ocular end of the sheath. A switch on the electric cord is used to turn the light off and on. The obturator (ob) fills out the sheath while it is being introduced into the bladder. After double ureteral catheterization, the telescope and sheath are usually withdrawn from the bladder while the catheters are left in the ureters to drain those organs independently into separate bottles for comparison and investigation. With the direct mode of catheterization this maneuver has been possible from the first presentation of the instrument, but it has been only lately that we have been able to so construct the indirect catheterizing telescope that it will permit the same thing being done. It is now accomplished with equal satisfaction with either telescope.

Irrigation.—Water is the most natural, comfortable and acceptable medium for distending the bladder for cystoscopy; consequently, where it is capable of being used for that purpose it should be preferred. But it must be perfectly clear in order to afford a view through it. If clouded by blood, by pus or by phosphates, etc., the view is obscured or defeated. In the older cystoscopes of Nitze, Casper and others this was a fatal objection in cases of active hematuria or very rapid pus formation and clouding of the fluid in the bladder. I remember a friend of mine bringing a latest model Nitze instrument from Europe, armed with fine lenses that gave the clearest view possible—while the medium remained clear; but, unfortunately, no adequate provision was made for irrigation or the exchange of fluids through it. The first case we tried it on was one in which there was pronounced bleeding into the bladder. My friend washed the bladder over and over through a catheter, until the return flow would run comparatively clear; then he would quickly introduce the new cystoscope and for a minute or so a fairly good view could be obtained, if one kept ahead of the in-rushing blood; but he had to be expeditious, indeed, to accomplish it, and as a matter of fact, the view afforded was very fleeting and unsatisfactory, for the reason indicated.

Such shortcomings betray the instrument in just the cases in which its services are most needed—the difficult ones. Its a poor cystoscope that doesn't give a good view in normal bladders, but its the good one that overcomes the difficulties and solves the entanglements of a complicated case.

Full, free irrigation is a prime necessity in a cystoscope that is not purely ornamental.

In the universal, herewith shown, that object has been attained, I believe, as well as it is possible in an instrument of its caliber, No. 23, French. As you see, the whole interior of the sheath forms a straight tube of large caliber, connected with both escape cocks, as well as having an opening full of measure at the outer, ocular, end. For the purpose of washing out a foul bladder this sheath is much more efficient than any catheter one can use; the stream that goes through the straight tube of the sheath is larger than that of any catheter of similar dimensions. On that account the preliminary irrigation is always done through the cystoscopic sheath, instead of through a catheter as was formerly done.

But of even more importance, still, is it to be able to change the contents of the bladder during the cystoscopic manipulations, where necessary. A much-desired ureteral opening may prove on search to be shrinking and elusive and become more so each minute unless the fluid can be kept clear by continual change during the work. In this instrument the telescopes are so constructed that space is left between them and the inner wall of the sheath for the passage in and out of fluid, as regulated by the operator by means of the little cocks at the ocular end. This faculty is esteemed at its true value only by the experienced cystoscopist. For me it has permitted successful cystoscopy in many apparently hopeless cases.

Operative Cystoscopy.—Without going into the subject extensively, it may be said that with appropriate equipment many useful measures are capable of accomplishment now-a-days through one of the forms of operative cystoscope that formerly required the major surgery of a cutting operation. Small calculi, foreign bodies, etc., are removed with certainty and comparative ease in this way; but I believe of more satisfaction than this, is it to know that much may be accomplished in the way of removing or assisting in the removal of stones in the ureter, of strictures of the lower end of the ureter or even higher up in that organ. The events relating to an experience of this kind of a member of our profession, Dr. Goddard, who resides in Saulsbury, Tenn., are striking. In brief, they are: At the time of our first conference, Oct. 29, 1908, the Doctor complained of having suffered from repeated attacks of renal colic during the previous twelve years; but that for the past nine months there had been no remission from a pain in his left inguinal region; it was there

day and night and was very annoying, to say the least. Inspection through the universal cystoscope at once disclosed a small stone enclosed in the orifice of the left ureter. It was observed by several physicians who happened to be in my office at the time. On completing the observations, the universal was replaced with the operative cystoscope, which is supplied with various accessories, such as forceps, scissors, dilators, cautery, etc., Through this an alligator forceps was introduced, passed in to the affected ureteral opening, widely dilated and withdrawn. Immediately the little stone popped out of the opening, and was followed by the emission of a quantity of pus and urine that showed plainly that the stone had been acting as a plug and obstructing the outlet of the ureter—possibly not completely, yet effectually. Hardly had it emerged from the ureter when the patient remarked, "That's the first time in nine months that I have been free from that pain in the lower part of the abdomen." The pain was gone, and it has never returned since then. In fact, he has had no return of the trouble since, the stone having passed out immediately afterwards in natural urination. It is presented herewith. You will note that it has a little spicule on one side. This spicule, I believe was caught in the lip of the outlet of the ureter and was the cause of the stone becoming hung at that point. It might have remained there indefinitely, but for the assistance given to aid its escape.

Ureteral stricture is just as real and definite a pathological condition as is ureteral stone, and just as amenable to cystoscopic methods of relief. Time does not permit of my relating some interesting incidents illustrative of this.

Necessity and Utility of Cystoscopy.—That the cystoscope is an absolute necessity in the solving of the intricate and difficult problems of genito-urinary practice, will probably be denied by none; but that it is a matter of necessity in the every-day work of the practitioner who indulges in it not as a specialty but in connection with general practice, is not so self-evident. Nevertheless, it is true. If he undertakes to do genito-urinary practice at all, he should be ready and willing to see that the patient receives the benefit of all modern devices and equipment likely to promote his belief. If the x-ray is necessary to that end, the x-ray should be used—whether by the practitioner himself or by someone whom he calls in for the purpose, it matters little. The point is that of obtaining the wonderful assistance of the x-ray—and through it the diagnosis and relief of the case. If the patient is suffering from prolonged infection in the urinary tract, from

persistent blood in the urine, or pyuria, or urinary irritation or inflammation, or from obstruction and its disastrous consequences, he should undoubtedly be given the benefit of cystoscopic investigation; and there can be no justification that I know of for withholding it from him or indefinitely delaying its application. I have been acquainted with many patients who had suffered for five, ten, fifteen or twenty years from so simple and curable a condition as stone in the bladder, just because the diagnosis had not been solved by the definite and certain method of cystoscopy. Years and years of intense suffering, day and night, with harrassing, interminable efforts at urination; lost sleep, lost health, lost peace of mind, lost money and means—all unnecessary and unjustified, for lack of a diagnosis. It can hardly be said that the operative part of the problem—the removal of a stone from a bladder—is attended with any particular danger or difficulty; so that the real default in these cases is solely in respect to diagnosis.

It may be said that one does not require a cystoscope to detect a stone in a bladder; that the insertion of a metal sound or stone searcher will solve the question at once. But I must beg the privilege of saying that that is far from being the case. There are many instances of stone in the bladder in which the stone is not capable of being touched, for the "click," by a metal instrument of any sort; it is buried in a diverticulum, or hugged underneath an overhanging prostate in such a way as to put it beyond the reach of the sound. Therefore, while a surgeon cannot be blamed for his failure to discover a stone by means of the stone searcher, since it is so fallible, the further fact stares him in the face that he should not depend on it where it gives only negative evidence. He should obtain for the patient the evidence presented by the cystoscope, which is both positive and negative, and absolutely convincing. The cystoscope detects the stone without touching it; discerns it from afar, so to speak, whether in the diverticulum or under the prostate; and discloses the number, the size, the shape and character of such bodies.

A similar office of supreme value is performed by the cystoscope in respect to the diagnosis of prostatic obstruction. A diagnosis simply of "prostatic hypertrophy," at the present time, is looked on as too diffuse and indefinite to be of any material value in determining the treatment appropriate for the relief of the case. As a working base for treatment, the following factors must be definitely determined: 1. Is there hypertrophy or not? 2. Is it producing obstruction? 3. The amount of obstruction

being produced? 4. The form and physical character of the obstruction? 5. The functioning condition of the allied organs, the kidneys and cardiac system?

While there are modes of investigation leading directly to the determination of all of these questions, the cystoscope must be depended on to answer the fourth one—the form and physical character of the obstruction. To illustrate, I refer to the drawings, showing two very different forms of prostatic obstruction, that require diametrically opposite modes of treatment; one an hypertrophy or overgrowth, the other a contracture at the neck or base of the prostate. If, in the first instance, we remove the overgrowth we remove the obstruction and recovery is the result. If, in that same case, we should burn an incision through the overgrowth by means of the Chetwood cautery, the result would be a divided overgrowth with no relief to the obstruction. But, take the second condition shown, the contracture; if we should remove the prostate and leave the ring of stricture tissue as before, we should attain no relief. But the simple burning of a groove through the ring of stricture tissue is sufficient to remove all impediment to urination, and no "prostatectomy" is needed at all.

In a given case the patient complains of frequency or difficulty in urination, he is requested to pass all of the urine that he can; after which a full-sized catheter is introduced into the bladder. If no obstruction is met with in the urethra, any obstruction present must be attributed to the region of the vesical neck; and if ten or fifteen ounces of residual urine is found, it is evident that there is serious obstruction at the neck, but the character of the obstruction is not yet determined. If the cystoscope be then introduced, the retrospective telescope used, any enlargement or overgrowth will be plainly visible and the diagnosis is clear. If it be seen that no overgrowth exists, and yet we know that the obstruction is located at the neck, the evidence of contracture at the neck is strong; and if, then, we replace the cystoscope with a Koolman dilator and get marked resistance when dilating beyond 20 or 23, French, the evidence is both positive and negative of contracture at the neck; with no prostatectomy needed.

When it comes to determining the source of inveterate infection of the urinary tract, or of hematuria, or of pyuria, the cystoscope shines as does no other instrument or means of diagnosis. Who may tell, from the symptomatology of renal calculus, whether a stone be in the right or the left kidney, in a given case? Cases can be cited, repeated many times in the literature on renal

diseases, in which the pain, colic and symptoms pointed directly toward the left kidney when the stone was really in the right one, and the left one was quite sound.

I met with two cases last winter in which there was chronic hematuria and at the same time complaint of pain and soreness on the left side, lumbar region, whereupon cystoscopy and ureteral catheterization proved that the blood was coming only from the side opposite that in which was the pain; both physician and patient were equally surprised in each case, as they were quite satisfied that they had already located the origin of the trouble; all they wanted to know was its nature.

In this connection, allow me to refer again to a case that I believe is a classic in medical literature, speaking volumes for exactitude in diagnosis and its bearing on treatment: That of a young man who was brought to me in 1906 by Dr. J. L. Crook, of Jackson, Tenn. For five years the patient had been affected with recurrences of gonorrheal infection of the urethra, and always without the justification of illicit intercourse. Every time he would apparently be relieved, through the agencies of posterior irrigations of approved gonococcocides, with prostatic massages and other proper modes of treatment, such relief would be followed, in a month or two, with renewed outbreak of the active discharge, which contained hordes of gonococci. After five years of this sort of thing the patient thought his burden was becoming irksome, and was ready to do desperate deeds in order to get well. After I had treated him for a month or two, without being successful in preventing the usual relapse, I proceeded to investigate the upper urinary tract by means of cystoscopy and ureteral catheterization. On looking into the bladder I saw three ureteral orifices, instead of two; there were two on the left side and one on the right. Catheters introduced into them gave: From the one on the right side, clear, healthy urine, from the outermost orifice on the left side, clear healthy urine; and from the inner orifice of the left side, cloudy, purulent urine, containing many gonococci.

Aside from the unusual anatomical and physiological conditions, thus demonstrated for the first time in the life of a patient, here was exposed the whole secret of the recurrent infections of the urethra. It was infected each time by gonococci coming down from above, from the infected kidney pelvis of a duplicating ureter—the one kidney on the left side probably having two pelves and two ureters, one of which had become involved by ascending infection from the original urethral gonorrhea. Without cystoscopy and catheterization the patient might have gone

on having his recurrent gonorrheas for the remainder of his life, possibly; but as it was, he was given three irrigations with argyrol into the affected ureter and pelvis, through the ureteral catheter, after which there was prompt and permanent relief and never a recurrence. The patient has since married and is the father of a child. He is a firm believer in virtue, now, but especially in the virtue of cystoscopy. One day, while three catheters containing wire stylets were lying within the three ureters, by treble ureteral catheterization, an x-ray photograph was taken, with the result shown in the accompanying illustration.

In closing this contribution, to which you have listened with so much patience and fortitude, I wish to express as best I may my high appreciation of the honor your Society has done me in inviting me to be with you, and to thank you sincerely for the pleasure you have given me in being with you on this occasion.

REPORT OF THE KANSAS MEDICAL SOCIETY.

Masonic Temple, Kansas City, Kansas, Wednesday, May 3, 1911.

The meeting of the House of Delegates was called to order at 9:30 o'clock a. m., President O. P. Davis, M. D., in the chair, Charles S. Huffman, M. D., Secretary.

THE PRESIDENT. The secretary will call the roll of delegates.

On roll call a quorum of the House of Delegates was found to be present.

THE PRESIDENT. There being a quorum present we shall proceed to the usual order of business. First will be the reading of the minutes of the last meeting.

DR. W. E. McVEY, Topeka. Inasmuch as the minutes of the last meeting have already been published, I move the adoption of the minutes of that meeting.

THE PRESIDENT. It has been properly moved and seconded that the reading of the minutes will be dispensed with, they having been published. Any discussion. (No response.)

Motion put and declared carried.

THE PRESIDENT. The report of officers. First the secretary will make his report.

The report of the Secretary was here read as follows:

SECRETARY'S REPORT.

The Secretary, this year, has attempted to keep in touch with all the Component County Societies and assist them in every way he can, from his office. Many counties have sent in excellent reports of work done during the past year. They have met regularly, and some excellent papers have been

brought to my notice, that were read at the county meetings. I could name a number of counties that have done this excellent work, but most of the proceedings have been published in the Journal, where all members could investigate for themselves, what was being done.

A number of bills were introduced at the last session of the Legislature, effecting the profession of this state. One of the astounding things was, those measures were bitterly assailed by many members of the Legislature, and especially was this true with the members of the House. Not much criticism was offered by the Senate, but every measure that came up in the House was attacked, and it was only by hard work on the part of a few members, that prevented an act passing, creating a separate Board of Examination for the Osteopaths, and also an act recognizing the Chiropractics as a distinct School of Medicine. The Osteopaths and Chiropractics had paid lobbyists that remained in the Legislature all winter, working for their measures, and their plea before the legislature was, that they were not treated regularly by the regular profession, and posed as martyrs. One thing is clear in my mind., and that is that our profession must have representatives that should be paid from the general fund of the State Society, to look after the interests of the profession at each Session of the Legislature.

There was one measure that became a law, that is of much importance to us, and that is an Act known as the Vital Statistics Bill. This passed just about as we wanted it, but the legislature failed to make sufficient appropriation for its enforcement, and the State Board of Health will have much difficulty in carrying out its provisions with the small fund at its disposal.

The membership in good standing is approximately the same as last year. While we have a few that have permitted their dues to lapse, we have also increased in new membership.

Our financial condition is on a sound basis, and we have an increase over last year.

The statement is as follows:

Amount of dues collected for the year,	\$2262.37	
Amount in Dr. Munn's hands at last report,	5190.95	
Interest on Harper loan,	55.00	
TOTAL,		\$7508.32
Amount paid out during the year on general account, \$	852.67	
Amount paid out on Journal account,	1026.00	
TOTAL,		\$1878.07
Balance in hands of Treasurer,	\$5630.25	
Respectfully submitted,		

CHAS. S. HUFFMAN, Secretary

Audited and found correct, May 5, 1911.

C. C. GODDARD,

H. M. CONNERS,

J. W. RISDON, Auditing Committee.

THE PRESIDENT. You have heard the report, gentlemen. Are there any objections to it? If not, it will be received and filed. Hearing no objections it is so ordered. Now, the report of the treasurer, Dr. L. H. Munn.

Report of the treasurer here read as follows:

TREASURER'S REPORT.

I have the honor to submit the following report:

Cash on hand May 3rd,	\$5190.95
Interest on Harper loan,	55.00
Cash received from Secretary,	2262.37

TOTAL, **\$7508.32**

Cash paid out to May 3rd,.....	\$1878.07	\$1878.32
Balance on hand,.....		\$5630.00

Very respectfully,

L. H. MUNN, Treasurer.

Audited and found correct, May 5, 1911.

C. C. GODDARD,

H. M. CONNERS,

J. W. RISDON, Auditing Committee.

THE PRESIDENT. Before acting upon the Treasurer's report we will hear the report of the Editor, Dr. James W. May. Report of the Editor here read as follows:

EDITOR'S REPORT

Your editor begs leave to submit the following report relative to the financial condition of the Journal for the year ending May 1, 1911:

Amount received from advertising,.....	\$1552.07
Amount received from State Society.....	1026.00

TOTAL,.....\$2578.07

Amount paid out as follows:

Twelve issues of Journal,.....	\$1200.00
Postage,.....	50.06
Envelopes for mailing,.....	45.00
Cuts,.....	12.25
Recopying articles by stenographer.....	2.00
Salary of editor.....	1000.00

TOTAL,.....\$2309.31

Subtracting the expenses \$2309.31 from the receipts \$2578.07 leaves a balance to be returned to the State Society of \$269.07. There is on the books for the past year to be collected \$120.16.

By this report you will see that the Journal will cost the Society for the past year \$646.77.

Respectfully submitted,

JAS. W. MAY, Editor.

Audited and found correct, May 5., 1911.

C. C. GODDARD,

J. W. RISDON,

H. M. CONNERS, Auditing Committee.

THE PRESIDENT. A motion will be in order to submit these reports to the Committee for auditing. Do I hear such a motion.

DR. GODDARD. I move that such committee be appointed. Seconded.

Motion put and declared carried.

THE PRESIDENT. Shall the Chair appoint this committee?

DR. GODDARD. It generally does.

THE PRESIDENT. I will appoint Dr. Goddard, Dr. Connor and Dr. Risdon.

THE SECRETARY. I suggest, Mr. President, that the Auditing Committee make their report by morning, and we would like to have that incorporated in our records, because the officers want to be clear from year to year on this matter, and have something to show that the reports are all right.

THE PRESIDENT. The next order of business is the report of the Councillors. The secretary will call the Councillors in the order of their districts, and we will hear their reports.

THE SECRETARY. The First District, Dr. C. W. Reynolds, Holton.

DR. REYNOLDS. Mr. Chairman, there is not very much of a report to be made for the First District; the condition is not very flattering. There are about half of my counties that have held meetings during the last year, and I believe all but one county have paid up their dues, —that is, a part of the members—and maintain an organization. Doniphan County seems to have no organization at all. I have been unable to hear from Doniphan by repeated letters; got no response at all. There are numerous times I have gone to the various counties to hold meetings and assist them, and when I would come there would not be a man show up. During the last year I have not gone out scarcely at all; but so far as I know, Doniphan County really has no organization. It is dead, and the others, I believe all maintain organizations, and the Secretary is receiving the dues from the members and remitting to the Secretary of this Association. We have eight counties, all maintaining an organization except the one, Doniphan.

THE SECRETARY: Mr. President, I would like to say for the benefit of Dr. Reynolds that Doniphan is getting in line since he was up there. The secretary has received a report.

DR. REYNOLDS: I did not know about that. They have been ignoring my communications.

THE SECRETARY: Second District, Councillor Preston Sterrett, Kansas City.

THE PRESIDENT: Dr. Sterrett is not present.

THE SECRETARY: Third District, Dr. H. B. Caffey, Pittsburg. (No response). I received a letter this morning from Dr. Caffey in which he enclosed a report, so I will read it.

THE PRESIDENT: Yes.

Written report from Dr. Caffey read by secretary, as follows:
TO THE PRESIDENT AND COUNCILLORS OF THE KANSAS MEDICAL SOCIETY:

The past year has dealt kindly with the Third District and every county remains organized.

Wilson and Woodson counties do not meet as regularly as other and more populous counties of the District, but the few doctors who do come together occasionally maintain an organization that works to the good of all concerned.

The big feature of the Third District is the District Society

known as the Southeast Kansas Medical Society. This Society meets twice annually and has proven to be a great success.

Montgomery County entertained this Society at Independence on April 11, and some sixty members enjoyed their splendid hospitality.

At this meeting the question of the annual examination of the eyes and ears of school children by the teachers was brought up and enthusiastically discussed by many of the doctors present and by a unanimous vote it was decided to bring the matter before the State Society at this meeting for general discussion and have that body take some definite action toward bringing about such examination in the schools of Kansas. It is sincerely hoped that each of one of the councillors and officers of the State Society will give this serious consideration and work for its adoption by the Health and Educational authorities of the state.

THE SECRETARY: Fourth District, Councillor W. E. McVey.

DR. McVEY: Mr. President, the Councillor for this District has not been very active, I am afraid. I have failed to get in touch with the secretaries of a number of county societies, and the inquiries I have made, have simply shown that the meetings are very irregular. Some of them have organizations which meet annually and elect officers, and that is about the extent of it. Clay County is well organized, and I have tried to make arrangements a couple of times to visit the society; but the arrangements have not been satisfactory. The last time I had planned to attend the Clay County Society I found that quite a number of members and officers would not be there, and no program had been prepared. In Shawnee County, of course we have a well organized society, the largest, I believe, in the state. But the arrangements—the railroad facilities in a number of counties in this district are such that it is almost impossible to unite the county in one organization. It seems to me some provision might be made in which the county societies could be organized by multiple county organizations made to accomodate the districts along the two railroads which divide that territory. The Golden Belt Society attracts a good deal of attention in that part of the State, and most of the physicians of that district, I think, are identified with it, and for that reason I think they pay less attention to their county organizations than they otherwise would.

THE SECRETARY: The Fifth District, Councillor W. E. Currie, Sterling.

DR. CURRIE: Most of the counties of the Fifth District

have been doing pretty good work. During the past year I have not made as many visits as I did last year. I visited but four of the ten counties during the past year. All of the societies have been holding meetings except McPherson and Barton Counties, which have had no meetings during the last year. I have tried in both places to get them organized and started again, but have failed so far. In Reno County they had a meeting and finally succeeded in having a banquet at Hutchinson, and in that way got them together and got the dues for the past year. They had but one meeting, though, in the year. Stafford County Society is to be commended on its fight in regard to chiro-practice. They had a chiropractic arrested for practicing medicine without a license, and appealed the case, and it was carried to the Supreme Court, and that left the Stafford County Society several hundred dollars in the hole; but they won their case. The Supreme Court decided that the chiropractic was practicing medicine without a license, and without authority. And just here, I think this should be one of the duties of our State Society, instead of being left to the County Society. No County Society feels like taking up a fight of that kind, knowing they will be several hundred dollars in the hole, possibly, if the case is carried to the Supreme Court, but since this case has been decided, it ought to be an easy matter to convict the chiropractics throughout the State. About two months ago the case was decided. I made one trip to Hutchinson to meet with Judge Martin and had other doctors meet with him to give him some points before the case was decided as to what we would consider the practice of medicine. We consulted with Judge Martin before he prepared his brief before the Supreme Court, and the case was decided in favor of the county society. The District Court had decided in favor of the chiropractic, but the Supreme Court reversed the decision. And I would like to see the Legal Department in the State Society look after the prosecution of cases of this kind throughout the State. I believe if the State Society would take it up, it could be done effectively. If it is done by the local doctors in a county society, people get the idea it is on account of their jealousy, and it is an injury to the profession in that locality. But if the State Society were to take this up and push it, that feeling would not be engendered. I think that is where that duty belongs.

THE SECRETARY: Sixth District, Councillor Arch D. Jones, Wichita.

THE PRESIDENT: He is absent.

THE SECRETARY: Seventh District, Councillor F. M. Daily, Beloit.

THE PRESIDENT: Absent.

THE SECRETARY: Eighth District, O. D. Walker, Salina.

DR. WALKER: Mr. President and Secretary, I think I haven't anything to report in the way of progress in my district during the past year. Something about a year ago the counties of Ellsworth, Ellis and Russell County were organized in what is known as the Central Kansas Society. It is a very thrifty young society. They are now holding their meetings quite regularly, every other month. The Saline County Medical Society I think is in very good working order. Our membership has increased somewhat, I believe—though I cannot say this with reference to Ellis. Possibly we have fallen off a few. Secretary Huffman can tell better about that. I think our Secretary has been just a little slack in getting in the dues this year, and sending them in to the State Secretary. There are two counties in the district, one of them which was organized by the Society seems to be dead now. I have spoken to some of the members of that county, and the President of that Society is here as a delegate, and now on the platform. I don't know whether there is any way in which this society can be rejuvenated or rehabilitated or not. It seems to me it ought to be, or if we could go a little beyond the confines of this county and along this branch line of road and get some men that do not reside in the county to go into a society, somewhat similar to the Central Kansas Society, which lies along the main line of the Union Pacific. We might possibly get a good working society in that way. I hope we may be able to do it. I am going to make a determined effort to do so. I hope some of the members of that County, or the physicians in that County will give their hearty support to that movement. As to the other County, Ottawa, someone said it had organized recently. If it did, it did it independently of the Councillor. I did not know of the organization, if it has been effected, but I see no reason—it seems to me that in both of these counties there is population enough, and there are enough physicians in both of these counties to have a good, fair working medical society. I hope to be able in another year to report more progress along this line.

THE SECRETARY: I would say for the benefit of Dr. Walker that Saline County has paid up; fifteen have paid.

DR. WALKER: Oh, well, that is away short.

THE SECRETARY: Ninth District, C. S. Kenny, Norton.

THE PRESIDENT: Absent.

THE SECRETARY: Tenth District, Councilor E. J. Beckner, Selden.

THE PRESIDENT: Absent.

THE SECRETARY: Eleventh District, Councilor, J. A. Dillon, Larned.

THE PRESIDENT: Absent.

THE SECRETARY: Twelfth District, Councilor W. F. Meade. I would suggest, Mr. President, that this call for reports of Councilors be continued over until the meeting in the morning. That is the way we did two years ago, and we got reports that way.

THE PRESIDENT: The next is reports of standing committees. What standing committees have we, Mr. Secretary?

THE SECRETARY: We have, Mr. President, the Committee on Scientific Work, which is composed of Huffman, May and Walker. I will just state that the work in getting up the program, which occupies about six months of the year, is the work of this committee; and I want to say that Dr. Walker did some very good work, while Dr. May did not do so much. But it is a big undertaking to arrange the program covering all parts of the state fairly, to give them representation on the program. Of course we can always find plenty to go on the program from the larger cities, which is all right; but we, as a State Society, try to get representation from all parts of the State, if we can get people who will prepare papers and take part in the program; and our work was along that line, and the result of our work was the program for this session.

THE PRESIDENT: This report will be received, if there are no objections, and made a matter of record.

THE SECRETARY: The next committee was one on necrology, composed of Dr. C. E. Scott, Wichita; Dr. C. F. Meninger, Topeka; and Dr. J. W. May, Kansas City.

THE PRESIDENT: The members of this committee are absent. We will have to defer the report until the next meeting tomorrow morning.

THE SECRETARY: I would like to say at this time, that I think this is a very important Committee, as we have a number of deaths each year, and until this year the Secretary had been getting a list of those who had died, who were members of the State Society, and reporting them; but we started this year in having a committee on necrology. I have noticed several deaths that have occurred over the state, and it seems to me this committee ought to look after the reports of deaths of all members carefully, and have them reported, so the Council could take some action, and perhaps send back some resolution or something to

the family that we had noticed there had been a death in our society. It seems to me only right we should give this matter more attention than in the past, and I hope the House of Delegates will take that up and insist on having a complete report from the Committee on Necrology each year.

DR. JONES: Mr. President, if this is before the house,—a committee of three on necrology is not a success. It is with divided responsibility, and it is not the success that a committee of one would be. While I have no fault to find with this committee—they may have an excellent report—still, I believe that the secretary is the logical committee of one on the subject of necrology, and I believe that we will get a better and a fuller report and that he will be able to keep a little closer in touch with the facts along those lines than any committee of three scattered over different parts of the state.

THE PRESIDENT: Of course discussion of this question would be out of order at this present time. Any further reports of committees?

THE SECRETARY: Another standing committee is Public Policy and Legislation, Dr. J. E. Sawtell, Dr. W. E. McVey and Dr. A. D. Jones.

DR. SAWTELL: Gentlemen and members of the House of Delegates: Dr. Huffman made a report I had in mind to make in reference to the vital statistics. All I have to say is that when I was attending the National Council on Medical Education and Legislation in Chicago March 1, before our bill was passed in the legislature, great interest was manifested. When I made my report I gave my opinion that the bill would be enacted. They had a large map showing the legislation in the United States and its progress from year to year, and much interest was manifested in Kansas as to whether or not it would take up a part of the registration area of the United States; and I am glad, as we all are, that this bill was enacted. And we have to thank some of our medical men who were in the legislature for getting this important bill through, which provides also for the registration of mid-wives. You are also aware of the appropriation of \$50,000 for a state tuberculosis hospital; also an appropriation of \$10,00 to continue the anti-tuberculosis exhibit in connection with the State Board of Health. The fact that the separate board for licensing osteopaths did not become a law we may say was due to the influence of the medical men in the House, and the Senate. It passed the House, however, in spite of the influence of all of our medical men, who, of course, opposed it; but I think we have Dr. Huffman, prob-

ably more than any member of the State Society, to thank that this bit of legislation was not enacted into a law. I will state that that he did it without very much support from the medical profession. I must admit that as Chairman of the Committee on Medical Legislation that we did not give him the support that he ought to have had. Now, I was there and helping what I could in person, but you have given the Committee on Legislation, nothing only a name. You have not provided any means or support for that Committee whatever, and as a matter of course we were not empowered to make any expenditures or to do anything to offset this bill. While the osteopaths had their lobbyists there paid, and doing everything; and every influence throughout the state that could be brought to bear upon both houses was brought forth and utilized to the greatest extent. While we had a membership of some fifteen hundred in the state, and some five or six thousand dollars in the treasury, and not a penny was expended in legislation along this line. A bill amending the Medical Practice Act, failed to become a law, fortunately. I do not want to criticise the spirit of the committee or those who were interested in introducing this bill. I was before the committee and the House and heard the bill and it was a good bill. But it seemed to me it was hardly policy that it did not come before the Committee on Public Policy, instead of the Committee on Examination and Registration. It was an excellent bill, but it submitted the entire Practice Act as being a bill for modifications thereof, and its intentions were to strengthen the bill, so that it would prevent, or give a better leverage to prevent the chiropractors. And what was the result? When it went before the House they chopped it all to pieces. It gave an opportunity to crack every part of the registration law and had it all chopped to pieces, and the very thing we did not want. The bill was so modified as to let in chiropractors without any examination and wholly exempted from the Medical Practice Act we have. I don't know what we would have had if it had gone through the Senate in the form in which it went through the house. We have our medical men in the legislature to thank very largely that that bill failed to become a law.

Our bill providing for inspection of schools was not passed. I took considerable time in getting up a medical inspection law which was worked out in part by the Superintendent of Schools of this city. I took the bill then to Topeka and went before the Superintendent of Public Instruction, Mr. Fairchild, and he looked it over and thought it was an excellent bill. I went before the

Board of Health and submitted it to that department, and they thought it was excellent. I went before the Committee of the House on Public Hygiene, and submitted the bill there, and they looked it over and were pleased. They thought it was an ideal bill, and it was to apply to cities of the first and second class. They wanted it to apply throughout the state but I told them the opposition would come from there, and we had better pursue this line first, and then if it was satisfactory, it could be extended. And I told them I thought this a model bill, and that it was such as had gone into force and effect in New York and other states, and approved. But when it was introduced in the House the Christian Scientists and other allied forces immediately got busy. This bill was misrepresented to the papers in a way that created considerable sentiment against the bill. So much opposition came from over the state and from the cities of the state, Topeka, especially, where the opposition was very great, that the Chairman of the Committee simply had to withdraw the bill. We had no means at hand to support it, and were not organized to give it the support it ought to have had. Though passed by the Committee unanimously, and I didn't think we could have any trouble in getting that bill enacted into a law, the opposition became so great we could not overcome it; and here the whole machinery of the State Society was idle. We had no means at hand to employ a stenographer and get up literature and go to press and counteract the influences being brought to bear at the time by the allied forces of the opposition throughout. Consequently the bill had to be withdrawn and no progress made.

Now, I am heartily in line with the suggestions made by the Secretary that some provision be made to carry on this work effectually. Heretofore the Committee on Public Policy and Legislation has simply been an honorary one to fill out the program, and the Council has made no provision for this Committee to be an active committee. I heartily recommend that sufficient funds be authorized at the disposal of this committee, and a committee appointed that can and will look after the interests of the medical legislation in the state, especially during the sessions of the legislature. In some states, in New York, I believe, for the past half century they have always had a standing committee at the State House during the sessions of the legislature, to look after medical legislation in the state; and they are doing so in other states; and if we are going to protect the interests of the medical profession in this state something along that line must be done. I suggest that an appropriation be made of \$500, or such a matter, and put in the

hands of that committee, and have that committee make an itemized report to this House of Delegates as to funds expended; and thus give them some power so that they can guide legislation. Now I want to say it is not a difficult matter, if this society would get busy, to prevent any vicious legislation that we might see fit. I was interested in noting how susceptible the members of the legislature are to respond to suggestions from their home district. When the petitions began to roll in from home, when they begin to hear from home about any measure that was coming up, they become interested immediately and got busy. That is the reason that the chiropractics and the optometrists have exerted such an influence. Bills have been passed in many states simply on account of neglect in cases of this kind. It went through our legislature, a vicious act, but there was nobody to oppose it; and we cannot depend on the doctors in the legislature to look after these matters. If you had been there during a session to see how busy these men were, you would realize that they cannot be expected to look after these matters of general interest, for they have so many other things to look after. This society should have a committee there during the meeting of the legislature, empowered to do something, and with funds at hand, subject to their disposal, to prevent vicious legislation throughout the state. And I do hope sincerely that this council, before the session closes, will take some action along this line and provide some means for having an active committee to look after these things; and this committee might extend its influence throughout the state as an advisory committee to the local committees of the county societies, and aid them in enforcing the laws that they have to enforce.

Now, I have a brief report of the Council on Medical Education and Medical Legislation with some recommendations in that line; and if it is not out of place, I will make that report while I am on the floor.

THE PRESIDENT: If there are no objections such report will be received.

DR. SAWTELL: I was appointed to represent Kansas on the Council of Medical Legislation which meets every year, and has been meeting in Chicago for some time, and met this year March 1st, 2nd and 3rd in Chicago. I attended the meeting. I will only give you a brief digest of the part on medical education. The work was largely along the lines of standardizing medical education in the United States. It probably would not be of interest to go into details in this, but simply to give you some of the things brought up, and a brief summarization of what was done.

Standardizing the course in medical schools received considerable attention. It has not been worked out fully to the satisfaction of all. Some recommend the lengthening of the medical preparations. Some recommend taking some of the work out of the high schools and putting it under the medical schools; and others recommend that more of this work be done in the colleges before they come to the medical schools. Others are in favor of taking some out of the universities and the colleges of the country and putting it under the medical instruction. With reference to a uniform standard of medical education in the various medical schools, there is a diversity of opinion. However, it seems to be drifting in this direction, that the aim of the school should be for instructions for teachers of medicine, practitioners of medicine, and sanitarians. The first course or division is sub-divided into those who investigate and those who give instruction. It would make the course unnecessarily long to have all the medical schools to prepare men for scientists or investigators in medicine, and hence the recommendation is made by some that part of the course be made elective. Harvard has made the first year of its course an elective one, allowing the students to select the first year what they desire to fit them for and what course in life they desire to follow, whether teaching or practice.

There is, as I say, a diversity of opinion. Some of them want to make the foundation so broad that most of the material would be utilized and it would simply be foundation rather than building the superstructure. A few years ago, before medical reorganization, a great deal more energy was spent upon the superstructure than upon the foundation; but the pendulum has swung the other way, and now they are discussing how they can make the foundation and the superstructure harmonious, and build a structure that will suit all occasions. In other words, not build a construction to suit every tenant, but to adapt the superstructure and foundation to the use of the structure for which the tenant is inclined, speaking metaphorically. It would thus be possible for the elective student to select his course in a manner in keeping with what he desires to follow, whether as a teacher or as a practitioner.

Now a report of the work on medical legislation. You are all aware what medical legislation has done during the past few years. In 1904 the Council on Medical Legislation was organized, and we see from that day down to this present time the gradual diminishing of the number of medical schools in the United States. At that time we had 166 schools in the United States—more than all the rest of the countries of the world together. Up to the present time

that number has been reduced to 129; but today we have about 45 per cent of the medical schools of the world in the United States. The number of medical students in 1904 was something over 18,000 graduated each year. Now it has been reduced to something over 5,000; but the tendency has been to make stronger schools and to turn out better men, and fewer in quantity. Medical legislation has undoubtedly benefitted the country in that respect. The main thing in medical legislation is to protect the people. We have succeeded in that measure most admirably, in protecting the public against ourselves. We have so protected the public that we cannot cross the state line anywhere without passing an examination under another state. We have raised the standard of education by turning out better men; and we are protecting the public all along against ourselves. But what has legislation done with reference to protecting the public against, for instance, the chiropractics, the Christian Scientists, and all other old cults? As we have seen from the reports already, they have no trouble in getting these cults recognized by the various states, simply because we are not organized. We have not followed the proper method of carrying out legislative measures. The University of Columbia in New York has recently provided for a course in chiropractics. It was recommended that they do not pursue that course. What they will do remains to be seen. The trouble is that we have not gone at legislative matters in the intelligent manner that we have medical organization. Under the old method of medical organization we went along, and the highest number of medical associations at that time was about four or five thousand. We did not get at the matter in an intelligent, businesslike manner, and not until the days of reorganization, when we got on a business basis; did we succeed in organization. Along legislative lines we are as far from intelligent action today as we were in the old days of reorganization. We have not organized—we have not gotten down to a business basis. A most interesting article was read there that I hope you will read when published, by Dr. Harris, of Chicago, along this line. He gathered the statistics and showed how in certain states where they have good laws, for example, California, where they have an excellent Medical Practice Act, they are absolutely unable to enforce that law. The juries will not convict, and even the courts are against the enactment of these laws. How difficult it is in our state to get the laws we have on our statute books enforced! It is simply because we have not gone at the matter properly. To illustrate this matter, before I read the recommendations, I was impressed with the report that was made

there with reference to the Committee of the American Medical Association that went before President Roosevelt when he was President, on some measure that the Committee had. They explained the matter most most carefully, and he listened most attentively; and when they had finished, he said, "Gentlemen, that is ideal. I agree with you that that is an ideal measure; but I fail to see that you have anything to show that this matter comes from the people. It is from the medical profession." He says, "Before you can get my sanction of this you must show me that the people want the bill." That is the reason we have failed in medical legislation in this country." We have not satisfied the people; we have not the people with us. We set out what is ideal and may by strenuous efforts get it enacted in laws, but when it comes to enforcing the law, we have not the people back of it, because they do not understand. Now, the American Medical Association, in its organization, has planned for a measure by which we can overcome this. Every county society is expected annually to have one or more public meeting to which the public is invited. How many societies are doing that? I admit our own society, of which I am proud, has not done it. How many county societies throughout the state, have done it? So far as the reading of reports in the Journal, I don't think many societies have done that. Before we can get legislation such as is desired and is ideal, and get it enforced, we have to take the public into our confidence. We have got to let them know what we are doing, and we will never be able to get the legislation that is desired and get it enforced until we take the people more into our confidence and educate them.

I recommend as a measure in this line that our county societies, and our councilors through the county societies, have public meetings and have papers along the line of desirable legislation, and have the public invited in, and interested in the subject, and that we take them into our confidence, and thus we may have their support in these legislative matters that may be desired for the interest of the society and for the benefit of the profession, and especially for the protection of the people throughout the state.

THE PRESIDENT: This report is open to discussion, and I hope that the members of this House of Delegates will discuss it at this time.

DR. BOLTON: I heartily concur in the report of Dr. Sawtell. I see they have put me on at the end of the program, but I hope you will all stay that possibly can, because I think I have

some things to say in my paper along this line that will be very interesting; at least they are to me, and I believe they will be to the members of the society.

These are things we have neglected, very much to our own detriment; and I merely make this remark so that if I can get some of you to stay over and hear my paper, I will be pleased.

THE PRESIDENT: Any further discussion?

DR. CURRIE: Mr. President, the doctor that just sat down says he has some good suggestions to make in his paper. I do not believe, though, that is just what this committee wants. I think they want some funds, and I would like to see this Council and House of Delegates appropriate a certain amount to be at the disposal of this committee. If someone will second it I will make the motion that the amount of \$300 be set aside.

DR. GODDARD: That is not enough.

DR. CURRIE: Well, that \$500 be set aside to be at the disposal of this committee to look after legislation.

THE PRESIDENT: The motion is out of order just at this time. The motion before the house is on the adoption of the report. If that be included in the report that will be put in the question.

DR. GODDARD: I second the amendment to the motion.

THE PRESIDENT: It is moved and seconded that the motion to adopt the report be amended by providing a fund of \$500 for the use of this committee. Are you ready for a vote upon the amendment?

DR. HUFFMAN: Mr. President, of course this \$500 cannot be used before two years when the coming legislature meets again. I don't know whether it is necessary to make an appropriation just at this time. I am in favor of it, and I think they ought to have it; but there will be no occasion to use the money until the legislature is in session. However, if the House of Delegates thinks it wants to make that appropriation now, it can be made and stand over. It might be a good plan to make it while we are in the mood; but it would not be available or necessary to use it until two years from now, when the legislature will be in session.

DR. GODDARD: Mr. President, I was in that legislature. If you have a committee of that kind they cannot get busy any too soon. If they wait until the next legislature assembles, it is too late. You have got to create public sentiment. You have got to have money to send out letters and stir up the doctors to stir up the people—to educate them on things they wish to accomplish for the good of the profession or the good of the people gen-

erally; and it is astonishing, the influence that can be brought to bear on that House by people sending their representatives; and if the doctors in the representative districts; the societies in those districts, the doctors themselves, would educate the people and talk to the people, we shall accomplish something. Take that bill that was withdrawn. If that had not been withdrawn, your medical law would have been repealed right then and there. They have gotten up such an intense feeling against the whole doctors' trust, as they called it, that it was simply awful, and everything that came up, if it was anything about medicine, was hooted down. They were rampant about it. The chiropractic people had created this idea of being abused and being martyrs, and the Christian Scientists took up this bill, saying that it subjected their children to operations and indignities of all kinds in the schools, and that it was an outrage on freedom generally, especially of the individual, and freedom of conscience and freedom of thought; and they had delegations there galore before that committee fighting it. To read the bill over it was the simplest thing in the world, but when they brought it up it was a horrible thing. If this committee is going to do any work it will want money. You can't do anything without money. And they ought to get to work right away and find out what they want to do, and build the organization up all through the state, and get the doctors especially to talk to the people in regard to it. That is the only way you will succeed.

DR. SAWTELL: Just one word with reference to that recommendation.

THE PRESIDENT: Very well.

DR. SAWTELL: I want to say that there should be one man there all the time, and his expenses should be defrayed, and the committee should have its expenses while they are down there; and when that committee on legislation are way from their homes attending to these matters, their expenses should be included.

DR. CURRIE: I hope this amendment will be passed at this time. We will not hear this, probably, at the next meeting. But Dr. Sawtell has given it to us now and it is fresh in our memories, and we know what is needed, and these facts are not liable to be before us next year. And another thing is, when an osteopath wants anything, he goes to the candidate before election and ascertains how he is going to stand on the matter if he is elected, and whether he is going to work for that or not. So if this appropriation is made, now is the time to have it made, so that

the work may be begun early when it can do some good, and not after the legislators are there and their work is well advanced and the plans have been laid. It will then be too late. And I hope this will be done now, and that the work will be commenced in time so that we may accomplish something.

THE PRESIDENT: Are you ready for the question on the motion to amend the motion to adopt the report by adding that \$500 be appropriated for the use of the Committee on Legislation?

The motion was put and declared carried.

THE PRESIDENT: We are now ready to vote upon the original question, if there is no further discussion, of the adoption of the report as amended.

The motion on the adoption of the report as amended was put and declared carried.

THE SECRETARY: There are some special committees. One is on Medical Defense, W. L. Hopper, of Fort Scott, J. D. Walthall of Paola, and J. E. Sawtell of Kansas City.

DR. SAWTELL: I presume I am the only member of the committee here, and we had no meeting during the year, and not being Chairman of the committee, I am not prepared to make a report, but probably the Chairman will be here tomorrow morning when we shall meet again, and he may be able to have some report then.

THE SECRETARY: There are two other special committees; I might name them so the House of Delegates will understand who they are, and then their reports could be made at our meeting in the morning. The other committee is one that was appointed to confer with Chancellor Strong in regard to medical education. That is Dr. O. D. Walker, Dr. C. W. Reynolds and Dr. Esterley. Then the council appointed another special committee toward getting evidence in regard to the conviction of Dr. Carson. That is in regard to work that this doctor had done in Kansas. That committee is composed of Drs. Currie, Reynolds and Fee.

THE PRESIDENT: The hour is at hand when we should perhaps open the regular meeting; unless the House of Delegates desires to continue its session at this time, we had better adjourn to meet again at nine o'clock tomorrow morning. If it is the will of the House of Delegates and no objections are heard, we will stand adjourned until nine o'clock tomorrow morning.

MINUTES OF MEETING OF HOUSE OF DELEGATES, THURSDAY MORNING, MAY 4, 1911.

Called to order at 9 A. M., by the President.

On roll call, a quorum was declared present.

Reading of the minutes dispensed with.

The Chair, announced that the next order of business would be the election of officers.

DR. GRAVES: Inasmuch as we have a long program this morning, I move you we adjourn the meeting of the House of Delegates for the election of officers until 12:45.

Motion duly seconded, and declared carried.

THE SECRETARY: We have some committee reports: One committee is that of Medical Defense, composed of Drs. W. L. Hopper, J. D. Wathal and J. E. Sawtell. This committee was appointed two years ago. They could not get together on their report a year ago and were given another year's time to report.

THE CHAIRMAN: Dr. Sawtell, I believe, is the only member of that committee present.

THE SECRETARY: We had a special committee appointed at the meeting of the Council at Topeka, last winter in regard to Dr. Carson. The object of that committee was to procure evidence to convict Dr. Carson of practicing medicine in the State of Kansas. The committee was composed of Drs. Currie, Reynolds and Fee.

DR. CURRIE: Dr. Reynolds can give the report.

DR. REYNOLDS: There is not much of a report to make, except this: The way this happened to be taken up in our town a brother of one of the members of a law firm who happened to be fleeced by Dr. Carson, was the cause of making that firm eager to take up the case against Dr. Carson, thinking they might procure his conviction for misuse of the mails. I then took the matter up with Dr. Pierce, and we ascertained that this legal firm had exhausted their resources, had employed the best legal talent in Kansas City, and had failed to accomplish anything. I believe there is nothing left for us to do, the man is a Gibraltar.

THE CHAIRMAN: The report of this committee is received and filed. Now, we will hear from the committee on Medical Defense, represented by Dr. Sawtell.

DR. SAWTELL: Mr. President and members of the council: I have not been chairman of this committee and the work has been turned over to Dr. Hopper who has had it in charge. We have had no meeting during the year. I received a message from Dr.

Hopper last evening stating that his family was ill, and he would not be able to be present, and that he wanted me to take charge of this matter.

I have no objection to a defense bill that is gotten up in the interests of the Society, but I believe that the bill published would require many modifications, and I do not see how we could properly do that unless we had time to look over the copy and to study it very carefully. I have a copy of this publication in my pocket, and if you want to take it up by sections and read it and discuss its provisions, we can go into it now; but I would like to have the Journal before you so that each could have it before him as we go over it. I think this is a matter that should be well studied before finally settled upon.

DR. BOLTON: I move you Dr. Sawtell read that as he has it. Seconded,

DR. W. E. McVEY: I think those members here who have read that report carefully will very readily agree it would take the committee days to put that report in shape to pass. It is conflicting, it would consume a great deal of time to attempt to do anything with the report as submitted, and it seems to me it is a waste of time at this particular period. I move you that the matter be referred back to the Committee or any other committee with instructions to report to the next council meeting, which I think occurs in January, when it can be discussed thoroughly, and be ready for submission to the House of Delegates at the next annual meeting. We could not act on that report as made.

DR. CURRIE: This matter was begun over three years ago, and has been laid over from time to time until now. It will be getting stale after awhile. The plan adopted is the same plan in operation in other states and has been for a number of years and found satisfactory; if we are going to adopt this, I would like to see it adopted now. It will take but a few minutes to adopt it, and get it in working order, and if necessary you could make some changes in parts of it later on. A number of cases are being brought all over the state, and people are either going into this or in some other Association where they find protection.

A MEMBER: I rise to second Dr. McVey's motion.

THE CHAIRMAN: There was a motion before Dr. McVey's, Dr. Bolton's motion has precedence over the other motion.

DR. BOLTON: I want to say this in defense of that motion, that the profession of the State, and our members, I think, are familiar with the conditions in our locality. We have a man down there, who is seeking all the time to cause these suits to be brought,

and he has succeeded in one or two instances, but the suits were finally settled without any trouble. The importance of this defense fund becomes more apparent every day, and this putting it off, and delay, what do we gain by it? Nothing! Now is the time to settle this matter—I have read that report very carefully, and believe it is a good thing; if we want to make any changes we can do it. The report has been formulated upon the practice of other States, and is based upon the practice in other States. We know it has proven successful and we ought not to delay the matter but settle it here.

THE CHAIRMAN: If you will indulge me a little, I would like to suggest it would be highly important and valuable to the members to have a printed copy of this report in hand at the time this is taken up for consideration. If possible, I would urge that this House of Delegates lay this over until the afternoon meeting in order that we may get the printed copies of this report, if you can change your motion accordingly.

DR. BOLTON: I will accept that. Consented to.

THE CHAIRMAN: It is moved and seconded this be taken up at One at the afternoon meeting.

DR. SAWTELL: This report, as Dr. Mc Vey has well said, will have to remodeled thoroughly. There should be an attorney employed to go over this and get it in legal form which it is not now. The thought, and the principles involved in it, are all right, but it is put together in such shape, that I question whether it would be of much benefit, if passed, without amendment. Medical men are not usually of a legal turn of mind. If we take this up this afternoon, I would suggest that we have an attorney present to get up a resolution that could be passed in legal form and possess legal force.

DR. McVEY: I do not believe it is necessary to employ an attorney to do that. It simply needs to be framed in plain language and there is nothing very difficult involved about it. It must be plain, and consistent with our constitution and by-laws. I would like to move you that a committee be appointed to prepare amendments. There will have to be an amendment made to this report if acted upon at this time. Either an amendment or a substitute to be submitted before an adjourned meeting of delegates.

THE CHAIRMAN: Do you make that as an amendment to the motion before the house. There is a motion before the house that this be considered at the afternoon meeting.

Are you ready for the original question?

The motion was then put to take up the matter of the Defense Report at the afternoon meeting, and was declared carried.

DR. McVEY: I move you that a committee be appointed to prepare amendments or a substitute to the report as printed.

Motion duly seconded, put by the Chair, and declared carried.

THE CHAIRMAN; I will appoint Drs. McVey, Sawtell and Walker as this committee. Any further business?

DR. CURRIE: There is a matter I would like to bring up before the House of Delegates. During the past few months the Stafford County Society began an action against a "Chiropractor, Dr. Johnson, as he styled himself." for practicing medicine illegally. They were beaten in the lower court but had the nerve to carry the case to the District Court where they were again beaten, and carried the case to the Supreme Court, where it was finally decided that the defendant was practicing medicine without a lincese. The Stafford County Society has incurred a bill of several hundred dollars in carrying on this suit. It has always been our opinion that the State Society should do something along this line, as it is rather too much for a county society to take up and too much responsibility for one man to look after a case of that kind. I would like to see the House of Delegates show their appreciation of the work of the local Society, and even go a little farther than that and appropriate at least half of the amount necessary to cover the expense of the necessary prosecution of that suit. The local Society has incurred an expense of three or four hundred dollars, and the case is not yet finally determined. I would like to make a motion that the State Society appropriate the sum of \$200.00 to help defray the expense of the prosecution of that case.

DR. WILKINSON: I would like to ask if the man has left the State.

DR. CURRIE: He is still practicing.

Motion duly seconded.

THE SECRETARY: I am thoroughly in sympathy with this. I think that no one county should bear the brunt of such a proceeding, where they have carried it on to a successful termination. I would like to have the motion amended so there should be a certified copy of the expenses bill sent perhaps to the Secretary and to the Council so that we could have some record of it. I am in favor of appropriating the \$200., and I would like the Clerk of the Court send a certified copy of the costs to the Secretary or President of the Society, and make that as an amendment.

Amendment duly seconded.

DR. WELSH: I will state, that our society in Reno County talked this matter over, and while we have no funds on hand, as our local dues are but \$2.50 per year, \$2 of which is sent to the State Society, we have agreed to make a collection of \$50 to \$75 and Rice County and some of the other counties have been asked to help the Stafford County Society out. The Stafford Society has only about 15 members, but they are game, and have pursued this case until it has been remanded for a new trial. In the inception, this fight was begun by an osteopath in Hutchison, against this chiropractor.

THE CHAIRMAN: Perhaps the maker of the motion will accept Dr. Huffman's amendment.

DR. CURRIE: Yes, I will accept that.

THE CHAIRMAN: It is moved and seconded that \$200.00 be appropriated for the prosecution of the case against the chiropractor in Stafford County, upon certified vouchers to the Secretary of the Society, any further discussion?

DR. WILKINSON: I do not want to be understood as criticising this motion; I am in favor of it. I think the case has proceeded further than we have gone in any of these cases. If this decision of the Supreme Court stands, it will be an authority which will govern the practice in the lower Courts.

The motion, as stated by the Chairman, was then put and declared carried.

Adjournment until 12:45 P. M.

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MINUTES OF MEETING OF HOUSE OF DELEGATES, THURSDAY AFTERNOON. MAY 4, 1911.

Called to order at 1 p. m., by the President.

On roll call, a quorum was announced present.

Reading of minutes dispensed with.

Dr. W. E. McVey, Chairman of the Defense Committee, then presented the following report:

"Gentlemen: The Committee appointed to revise the Report of the Defense Committee, beg leave to submit the following as an amended report:

1. That the Constitution be amended as follows: That there be added to Article IX, Section 4, of this Constitution:

"A Medical Defense Board consisting of three members of the Council shall be elected at the annual meeting of the Council for the term of three years: Provided, that at the first election, one member shall be elected for the term of one year, one for the term of two years and one for the term of three years. The Medical Defense Board shall elect its own chairman, and the Board shall perform such duties as are provided in the By-Laws."

That Article XI, of the Constitution be amended by adding:

"Section 2. The sum of two thousand dollars (\$2,000.00) shall be set apart as a Medical Defense Fund, and there shall be added thereto annually the sum of 25 cents per capita of the membership of the Society. This fund shall be kept in the treasury of the Society and shall be subject to be drawn upon the Treasurer, signed by the Chairman of the Medical Defense Board and the President of the Kansas Medical Society."

2. That the By-laws be amended by adding the following, which shall be designated and known as "Chapter VIII."

"Section 1. It shall be the duty of the members of the Defense Board severally or collectively to investigate all claims of malpractice made against members; to take full charge of all cases, which after investigation they will have decided to be proper cases for defense, and prosecute such defense to the end, pay all costs of such defense, but they shall not pay or obligate the Medical Defense Board or the Kansas Medical Society to pay any judgement rendered against any member upon the final determination of any such case. They shall be empowered to contract with such agents or attorneys as they may deem necessary."

"Section 2. The assistance for defense, as herein provided, shall be available only for the members of the Kansas Medical Society in good standing. No member shall be defended for an action unless he was a member of the Society and a resident of the State at the time when the alleged malpractice was committed."

"Section 3. It shall be the duty of any member of this Society threatened with a suit or suits for malpractice, to immediately notify the President of the County Society of which he is a member, who shall at once send him an application blank for the names of witnesses and so forth, and on receipt of this blank properly filled in, the President shall immediately appoint a committee of which he shall be the chairman and they shall proceed to investigate the charge made against such member."

"Section 4. This committee shall examine the defendant member and his witnesses, if necessary under oath. If the committee shall agree that it is a case to be defended it shall so report to the Chairman of the Defense Board of this Society. If this County Committee shall decide that it is not a case to be defended, the defendant may appeal direct to the Defense Board of the Kansas Medical Society which shall in all cases have the final decision, whether a case is to be defended or not. The findings of these committees if unfavorable, are to be communicated to the defendant alone."

Section 5. That present Chapters VIII, IX, X and XI be made Chapters IX, X, XI and XII respectively.

(Signed)

W. E. McVEY, Chairman,
O. D. WALKER,
J. E. SAWTELL, Committee.

It was moved and duly seconded, that the Report of the Committee be adopted.

DR. FEE: I would like to ask how much money this would bring into the Society for this defense, with the sum of 25 cents per member to be set aside besides this \$2000.

DR. McVEY: I think we have about 900 members.

DR. FEE: We have the \$2000, to start with. I have had some little experience in defending mal-practice suits myself and defended mine successfully without expending any great amount. This amount can be easily increased or diminished, if necessary. Surely, the \$2000, with \$200 or \$300 additional each year are enough to commence on. We are not looking for a great many lawsuits. I hope this report will be accepted as amended.

I believe the Committee must have gone over it pretty carefully and it seems to me it covers the ground.

DR. McVEY: I want to explain one point. These Companies that undertake to defend these suits for which a charge of \$12 or \$15 is made according to the membership, undertake in consideration of this sum to pay judgments up to \$5000. This Society is not obligating itself in this to pay judgments, if the defense should be unfortunate and judgment rendered against the defendant after taking the case to the highest Court. The member must bear that himself. With this \$2000 to begin with, in the first year or two we can determine about how much it would require, and if necessary the annual amount could be increased at a subsequent meeting.

DR. SAWTELL: We investigated that part of the proposition thoroughly with reference to the amount of money set aside and in the other States that have this provision in force, I do not think there is such an amount appropriated, as we have set aside here. For instance, in Missouri where this proposition has been in operation for some two years or three years, they have defended everything that came up and I do not think they have spent \$500 all told. I think the amount is abundant, in the light of the experience we have had to guide us.

The question was then put by the Chair, and declared carried.

DR. O. D. WALKER: Just a little matter I would like to bring about and that is the printing of a new Constitution and by-laws. Every member of the Society should have a copy of the Constitution and By-laws as amended. I move you that we have two thousand copies of the Constitution and By-laws of the Kansas Medical Society printed, and a copy sent to each member.

Motion seconded, and being put was declared carried.

DR. SAWTELL: Just one matter in connection with that, and while the Secretary has the matter in charge he will think of it. That is to make the name of the Society, as printed in the Constitution comply with the name under which the Society was chartered. It does not do so now, and it may prevent legal complications later, if that is done. The name should be the Kansas Medical Society, and not the Kansas State Medical Society.

DR. REYNOLDS: I would like to suggest that every member of the Profession belonging to this Society in Kansas, be notified of this action of the Kansas State Medical Society.

THE CHAIRMAN: It will be printed in the Journals.

THE SECRETARY: Mr. Chairman, I think that is a good suggestion. There are something over 1500 names on the books

of this Society, and there are about 2700 Doctors in the State. I believe it would be a good plan to have instructions to write a letter to every member of the Profession in the State, of this action. I think it will help increase our membership.

It was here moved and seconded that the Secretary notify every member of the Profession in the State of Kansas, of the action of this Society regarding the establishment of a Defense Board.

DR. JONES: I would like to offer an amendment, that this notice be sent through the organized Society in the neighborhood of the individual. That is, if the County is organized, to have the notice sent to the Secretary of the County Society, and ask him to notify all members of his County. This is to prevent any solicitation of undesirables, inasmuch as the County Society has a veto on their coming in, they would be able to use discrimination in this matter of notification.

THE CHAIRMAN: Do you accept that amendment.

DR. REYNOLDS: Yes, that was what I was trying to get at.

The motion as amended was then put by the Chair, and was declared lost.

THE CHAIRMAN: The question is now on the original motion, that notice be sent by the Secretary of the State Society to the profession of the State at large.

The motion was then put by the Chair, and declared carried.

The next order of business being the election of officers. The Chair appointed Drs. Bolton and Everhardy as tellers, and the members proceeded to cast their votes on the informal ballot for President: resulting in the highest votes being cast for Dr. J. T. Axtell and Dr. George M. Gray respectively.

DR. WALKER: I move that all names except those receiving the two highest number of votes be dropped.

Seconded and declared carried.

The members then proceeded to take the formal ballot for President, resulting as follows: Total vote, 46; of which Dr. Axtell received 29, and Dr. Gray 17; Dr. Axtell was thereupon declared elected President of the Society.

DR. WALKER: I move that Dr. Axtell's election be declared unanimous.

Seconded and declared carried.

Dr. Axtell was then called upon the floor, and addressed the members as follows:

DR. AXTELL: This is certainly a very unexpected honor and one that I wish to tell you I appreciate. I have thought

a great deal of this Medical Society, it has been a wonderful help to me, and the new Society, as we have reorganized it in the last few years through the County Medical Societies, I am sure has been a very great benefit to the medical profession. I believe that we have done the greatest thing to-day and made the greatest move in the line of forward advancement that the Society has ever made when we established this Defense Board in our Constitution, and I trust we shall continue to make moves of like value.

The informal ballot was then taken upon the office of Vice-President, resulting in the three highest numbers of votes being cast for Drs. Geo. M. Gray; O. D. Walker, Drs. H. G. Welch, and G. W. Anderson, each receiving 4 votes.

DR. ————— I move that the rules be suspended and the Secretary be instructed to cast unanimous ballot of the Society for the 3 person receiving the highest number of votes.

DR. McVEY: I second the motion.

DR. O. D. WALKER: Before that is voted upon, I think my name is one of the first. I am already a Councillor of this Society, and not eligible to be Vice-President unless I resign, from the Council, and I do not choose to do that.

The motion was put and declared carried.

THE SECRETARY: After the announcement made by Dr. Walker, and knowing him, as I do to be one of the most efficient Councillors that we have, and that really the duties of a Councillor are more important than those of Vice-President, I will cast the votes of the Society for Drs. Gray, Welsh and Anderson, as Vice Presidents.

On motion duly seconded and carried, the Rules were suspended and the President instructed to cast the vote of the delegates for a candidate for the office of Secretary.

The Chair announced the vote in favor of Dr. Charles S. Huffman, who was declared elected secretary.

On motion duly seconded and carried, the Secretary was instructed to cast the vote of the Society for a candidate for Treasurer.

The Secretary announced the vote cast in favor of Dr. L. H. Munn, who was formally declared elected Treasurer.

On motion duly seconded and carried, the Secretary was instructed to cast the ballot of the delegates for a candidate for delegate to American Medical Association, for an unexpired term of one year, and a delegate for the term of two years.

The secretary announced the vote as follows: Dr. O. P. Davis of Topeka, for the term of two years; and Dr. M. Trueheart,

of Sterling, for the term of one year to fill the vacancy caused by removal of Dr. O. J. Furst, from the State.

On motion duly seconded and carried, the Secretary was instructed to cast the vote of the Delegates for candidate for Councillor for Fourth District.

The Secretary then announced the vote cast in favor of Dr. W. E. McVey as Councillor of the 4th District.

On motion duly seconded and carried, the Secretary was instructed to cast the votes of the Delegates for candidate for Councillor of the 5th District.

The Secretary then announced the vote cast in favor of Dr. W. E. Currie of Sterling, as Councillor for the 5th District.

On motion duly seconded and carried, it was ordered that the President shall appoint the Councillor for the 9th District.

THE CHAIRMAN: It goes without saying, I will appoint with great pleasure Dr. C. S. Kenny, of Norton, as I can testify to his being a very efficient Councillor.

It was moved, seconded, and declared carried, that the election of a Librarian be dispensed with, and it was so ordered.

Adjournment, Sine die.

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Wound Dressings.—Unless wounds are suppurating very freely, as a general proposition they are dressed too often. Peroxide of hydrogen injected into cavities and sinuses often carries the infection further into uninvaded tissues. Peroxide is also too strong to apply pure to newly healed tissue.

Sterilized gauze without dusting powder is sufficient protection for any clean surgical wound. Sterile water, saline solution, or very dilute antiseptic solution should always be given preference over the stronger antiseptics, which, in destroying the pus cocci, at the same time destroy the new epithelial tissue by which granulating wounds are covered. There is no better protection against infection than the free application of large sterilized pads or dressings with which they should be abundantly covered. Absolute physiological rest by a properly applied splint, or confinement, in bed, is a great time saver in the healing of wounds. Silk-worm sutures are much less likely to produce stitch abscesses, and should be given the preference over catgut wherever practicable. Zinc oxide plaster has a wider field of usefulness as a surgical appliance than has been given to it. In dressing wounds, all materials should be thoroughly softened by warm sterile water before the dressing is removed.—

L. Sexton, in the Virginia Medical Semi-Monthly.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - EDITOR.

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Parvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1904, it incorporated the Wyandotte County Medical Journal owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

LIST OF OFFICERS.—President, Dr. J. T. Artell, Newton; 1st Vice-President, Dr. H. G. Welsh, Hutchinson; 2nd Vice-President, Dr. G. M. Gray, Kansas City; 3rd Vice-President, Dr. G. W. Anderson, Beverly; Secretary, Chas. S. Huffman, Columbus; Treasurer, L. H. Munn, Topeka; Librarian, S. G. Stewart, Topeka.

COUNCILLORS.—1st District, C. W. Reynolds, Holton; 2nd District, Preston Sterritt, Kansas City; 3rd District, Hugh B. Caffey, Pittsburg; 4th District, W. E. McVey, Topeka; 5th District, W. E. Currie, Sterling; 6th District, Arch D. Jones, Wichita; 7th District, F. M. Dailey, Beloit; 8th District, O. D. Walker, Salina; 9th District, C. S. Kenney, Norton; 10th District, E. J. Beckner, Seldon; 11th District, J. A. Dillon, Larned; 12th District, W. F. Fee, Meade.

EDITORIAL

Work has made me what I am. I never ate a bit of idle bread in my life.—Daniel Webster.

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"The successful man of today is the man who has ideas; who does things the average man does not think of. The young man who does his level best no matter how small his salary, is the man who makes the greatest success."—Alexander H. Revell.

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On account of the large amount of matter contained in the proceedings of the Society published in this issue all of the departments are necessarily curtailed.

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The proceedings of the House of Delegates occupies a large part of this issue of the Journal. These proceedings are published so that all the members of the Society, may become cognizant of all the "business" of the Society. There are some important things discussed and new laws enacted that are of special interest. The one in reference to the establishment of a protective defense fund which is of particular interest and importance. Read all of the proceedings and then be informed as to the condition of the Society in all of its departments.

The annual meeting of the A. M. A., at Los Angeles, June 27-30 is exciting a great deal of interest partly from the fact that it is such a fine trip in a scenic way and also there are so many points of historical interest, that the trip will be one of continuous enjoyment. At every point on the route going and coming, viz., Grand Canon, Yellow Stone Park, Denver, San Francisco, Seattle, Vancouver and almost numberless side trips make the trip an outing never to be forgotten.

Many special trains will be run both going and coming over the various routes. One must select the return route and also purchase a round trip ticket if advantage is to be taken of the extremely low rates to be in effect. The headquarters in Los Angeles for the Medical Society of the Missouri Valley will be at the Alexandria Hotel. The various sections will have headquarters at hotels nearest their meeting place.

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The Kansas State Medical Society, at their last meeting, at Kansas City, took a long step in the right direction by providing a Medical Defense law, which provides for Medical Defense for any member of the Kansas Medical Society, in good standing, who is charged with having committed mal-practice. The stand taken by the Society, in itself will almost be a guarantee against suits of this character unless there is real merit in the case. It is going to add to the strength and unity of our organization. Every physician in the State who is eligible, should be a member of the State Society, if it is only for the purpose of having the support of the physicians of the State in suits of this kind. While the plan may not be all that is expected of it, to begin with, we feel that it can be worked out in a way that will be for the benefit of all.

The report of the Defense Committee is included in the proceedings on another page of this issue. C. S. H.———

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NEWS NOTES

Hospital Cornerstone Laid.—The cornerstone of the new German Hospital at Kansas City, Mo., was laid with formal ceremonies, April 30. The building is to cost \$150,000 and marks the completion of a quarter of a century's existence of the institution.

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Kansas City, Mo., has been waging a war on the unclean dairies. The milk inspectors have been diligently at work and it is reported that the crusade has materially improved the milk supply.

Dr. Andrew H. Fabrique, Wichita, was made a life member of the Sedgwick County Medical Society at its meeting, April 11.

Dr. Francis H. Slack of the University of Kansas, Lawrence, formerly director of the Boston Bacteriologic Laboratory, has been offered the secretaryship of the Boston Board of Health.

Kansas City, Kansas., authorities after waiting for several dogs to "go mad" started a slaughter of the canines. Several hundred were killed. The law provides that when a dog is neither muzzled or chained he can be killed outright.

A Decision Against Osteopaths.—The Appellate Division of the Supreme Court, Second Division, has handed down a decision upholding the New York Board of Health in refusing to accept death certificates signed by doctors of osteopathy. According to a statement made by the president of the Osteopathic Society, the osteopaths are at a loss to understand on what grounds such a decision could have been based, and the matter will probably be taken to the Legislature.

Remarkable Saving of Child Life in Pennsylvania.—Commissioner of Health Dixon decided a year ago to distribute and urge the use of 5000-unit initial doses of antitoxin. The death rate at that time among the little children of the poor stricken with diphtheria, who were being treated with 3000-unit doses, was about eight per cent, while the rate in diphtheria without the use of antitoxin is forty-two per cent. Now, out of 1225 cases of diphtheria treated with the 5000-unit doses distributed by the Department of Health, there have been only eighty-one deaths, or 6.61 per cent. Moreover, there is a saving in money, for one 5000-unit dose administered within the first twenty-four hours of onset is found to accomplish the same good results as two, three or more of the 3000-unit doses.—Penn. Medical Journal.

SOCIETY NOTES.

The Annual Meeting of the National Association for the Study and Prevention of Tuberculosis will be held in Denver June 20 and 21. Members of the American Medical Association may find it convenient to attend the meeting in Denver on their way to the Los Angeles meeting.

The American Surgical Association will meet at Denver June 19-22. Any one wishing to do so may attend this meeting on the way to Los Angeles.

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The Tenth Annual meeting of the National Association for the Study of Epilepsy and the Care and Treatment of Epileptics, will be held at St. Louis, Mo., June 16, under the auspices of the St. Louis Medical Society. The meeting place will be the rooms of the medical society at 3525 Pine Street.

A cordial invitation is extended to all, whether members or not, to attend the meetings and take part in the discussions. The program will include the following papers; the first session opening at 10:00 a. m., June 16th:

President's Address, "The Prevention of Epilepsy"; Mr. William C. Graves, Chicago, Ill., "Report on the Care of Epileptics in Special Institutions in the United States"; Dr. T. C. Biddle, Topeka, Kansas, "The Care of Epileptics and the Advantages of the Kansas Method"; Dr. Podstata, Chicago, Ill., "Epileptic Mental Enfeeblement"; Dr. W. W. Graves, St. Louis, Mo., "The Scaphoid Scapula Syndrome"; Dr. Sharp, West Baden, Ind., "Sterilization of the Unfit, After the Indiana Plan"; Dr. J. E. W. Wallin, Skillman, N. J., "The Binet-Simon Method of Measuring Intelligence Applied to Epileptics"; Col. F. D. Whipp, Springfield, Ill., "Accounting Systems in Public Institutions"; Dr. Albert E. Sterne, Indianapolis, Ind; "The Importance of Recognizing Epilepsy in the Pre-Convulsive Stages"; Dr. Matthew Woods, Philadelphia, Pa., "The Industrial Status of the Epileptic"; Dr. A. L. Skoog, Kansas City, Mo., "Focal Epilepsy with a Report of Several Cases"; Dr. W. F. Drewry, Petersburg, Va., "Planning a Campaign for the Establishment of a Colony"; Dr. Everett Flood, Palmer, Mass., "Epilepsy as an Inheritance and other Factors"; Dr. Frederick W. Guild, Palmer, Mass., "The Significance of the Onset of Convulsions to the Epileptic"; Dr. Edmund A. Douglas, Palmer, Mass., "A Case in Which a Series of Jacksonian—Petit Mal and Grand Mal—Attacks preceded Status Epilepticus"; Dr. Alden, V. Cooper, Palmer, Mass., "An Interesting Case of Chronic Epilepsy, with Apparent Recovery Following Vasectomy"; Rev. J. W. Frankenfeld, St. Charles, Mo., Title Announced Later; Dr. G. Kirby Collier, Sonyea, N. Y., "Surgery in Epilepsy;" Dr. J. F. Munson, Sonyea, N. Y., "The Gross and, in Part, the Microscopical Lesions in Over 300 Epileptics".

A completed program will be issued before the meeting, giving the order in which the papers will be presented.

The President of the Association is Dr. M. L. Perry, of Parsons, Kansas.

Communications.

Stafford, Kansas, May 11, 1911.

Kansas Medical Journal Kansas City, Kansas.

DEAR EDITOR.—Stafford County Medical Society has succeeded in enforcing our Medical Practice Act against one P. W. Johnson, Chiropractor, of Hutchison, Kansas, who has been coming into our County and practicing his profession. This has been obtained at a considerable outlay of time and money on the part of our members. We believe the facts should be given through our Journal, to the Medical Profession throughout the State, and that they be urged to avail themselves of the decision this Society, has obtained from our Supreme Court. We would suggest that actions against Chiropractors should always be filed in a district Court and under no occasion before a Justice of the Peace.

CYRUS WESLEY, Sec. Stafford County Medical Society.

P. W. Johnson a chiropractic of Hutchison, Kansas was convicted in the District Court of Stafford County, Kansas, last Friday, May 5th, 1911, for practicing chiropractice and also for advertising as a chiropractor. This case had previously been before the court when Judge Brinckerhoff was Judge of the District Court of Stafford County and the defendant Johnson filed a motion to quash the information for the reason, among other things, that he was a chiropractor and for that reason was not practicing Medicine and Surgery also, that as the Statutes of Kansas made no provision for a chiropractor to obtain a certificate from the State Board of Medical Registration and Examination the law was unconstitutional for the reason that it was class legislation and discriminated against a person desiring to practice chiropractice. The District Court in the first instance took the position of the defendent, Johnson, and quashed the information. The case was taken to the Supreme Court by the State and the Judgment of the District Court reversed. The Supreme Court held that a person practicing chiropractice or advertising as a chiropractor committed a offense under Section 8090 of the General Statutes of 1909, and that the State had a right to regulate the practice of medicine and surgery and require a person to obtain a certificate in order to practice. The case was remanded to the District Court of Stafford County and Johnson entered a plea of not guilty to the information. The case resulted in a verdict of guilty upon both

counts of the information one for attempting to treat a sick person and the other for advertising to treat the sick without having received a certificate from the State Medical Board authorizing him to practice Medicine and Surgery. The State of Washington has just decided against chiropractors as has also New York and Iowa.

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Certainly the Stafford County Society deserves commendation for the energetic way in which this case was brought to a successful issue. If we all had as much energy and willingness much more good would be accomplished.—Editor.

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MISCELLANEOUS

For Honest Advertising.—"The action of the federal authorities in excluding offending newspapers from the mails protects only a part of the readers of fraudulent advertisements. There should be state legislation holding publishers accountable for printing the palpably dishonest advertisement swindlers, and of all other unscrupulous advertisers who seek to betray the reader's confidence in the integrity of the press." Above is the concluding paragraph of Governor Osborne's inaugural message to the legislature. It is given prominence here for the reason that no Detroit paper has printed it, with the exception of the Times, and we believe it merits the widest possible publicity. Dishonest advertising is eliciting increasingly courageous criticism from the more reputable journals throughout the country.—Detroit Saturday Night.

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Taft's Views of American Physicians.—While the opinion of President Taft may not be as important as his partisans would have people believe, still it is a pleasure to record his views on the medical profession and its achievements. In declining with regret an invitation to attend a banquet of the Philadelphia Medical Society, he remarked: "I may say one thing, and that is that we have real ground for national pride in the fact that England, France, Germany—Germany not so much so—and Holland have been engaged in the colonial business in the tropics for a hundred years, some of them two hundred years, and yet it remained for American physicians and especially the physicians in the army, to discover more things in the ten years since the Spanish-American war than were discovered in the whole two centuries before that time, and if nothing else justified the Spanish-American war the discoveries of the American physicians since that time—what I may term the sequence of

the war—were ample to justify the expenses of the war ten times over. It is a real record of achievement of a national character that everyone who understands it must dwell upon with sincere pride."—The Lancer Clinic.

Health Hints.—Good air means good work. Educate the mother and save the child. In saving the child you are saving the state. Defective sanitation means a defective civilization. The common drinking-cup is a common nuisance and should be abolished. If anyone hands you a lemon, make lemonade of it. It is both healthful and pleasant to take. Bad air and a high temperature in the school room are certain to produce a low grade of scholarship in the pupils. If factory or workshop surroundings are clean and healthful the output will most likely be large in quantity and high in quality.—From Bulletin, Chicago Department of Health.

In a recent issue of a New York evening paper there were by actual count thirty-six quack advertisements, not including the announcements of advertising dentists. Fitting glasses and treating deafness by mail seem to be particularly unconvincing. One "Professor" takes three columns to expound his new method of curing epilepsy, hay fever, Bright's disease, and other ailments by instillation into the eye of a colorless, odorless liquid; this, it appears, is the latest method of reaching the sensitive filaments of the nervous system. Wrinkles, piles, rupture, obesity, baldness, liquor and tobacco habits, heart disease, consumption and all the various pathological conditions in the genito-urinary tract are specialties of the quacks. The quack saves a good deal of time by having the patient make his own diagnosis, a detail which the regular practitioner is notoriously slow and finicky about.—New York Medical Journal.

We were always impressed with the distinguished newspaper physician who posed as a homœopathic specialist and made a dignified and imposing figure as he reassured the public with uplifted arm in his electrotype portraits, and now we hear he has been fined heavily at the instance of some jealous medical society for selling cane sugar globules as a powerful remedy for asthma, dyspepsia, and other ills. We ask with pathos. Whom can we trust? Think of the pained bewilderment of the editors of such papers, perchance as permitted themselves to be persuaded, perchance against their better judgment, of the gen-

uineness of the therapeutical pretensions of this open handed advertiser.—N. Y. Medical Journal.

CLINICAL NOTES

Management of Peritonitis.—Gastric lavage should be made at once in every patient suffering from any form of peritonitis, except from stomach or duodenal perforation. If nausea or vomiting or gaseous distention is present, no matter what other form of treatment may be contemplated.—A. J. Ochsner, in the Boston Medical and Surgical Journal.

Ichthyol is one of the most useful drugs in dermatological practice. Internally, in capsules containing from five to fifteen drops, ichthyol is of particular service in acne, eczema, psoriasis, furunculosis and lupus. Externally, a fifty per cent. solution is highly efficient in erysipelas.—American Journal of Dermatology.

In a boil, just starting, pull out the hair and introduce a fine probe which has been dipped into carbolic acid. Also touch the center of the inflamed area with the same solution. This may abort the boil.—American Journal of Dermatology.

A small, hard, irregularly nodular scalp tumor is very likely an endothelioma. A little section should be removed under local anesthesia for microscopical examination. If the diagnosis is corroborated, radical removal is necessary.—American Journal of Surgery.

Over distention of the bladder due to neurasthenia, hysteria, shock or prolonged voluntary retention may be overcome by administering a rectal enema consisting of a pint of warm water and an ounce of glycerine.—Ohio Medical Journal.

Eczema.—When the eczema has healed, and the skin remains tender, itchy, and easily cracked, Ravogli recommends the following application:

Carbolic Acid.....	dr. j
Glycerin.....	dr. j
Rose Water.....	oz. ii j
Alcohol.....	oz. ii j

to be rubbed gently on the skin with a cotton tampon.—Medical Standard.

Walter T. Danreuther, New York, states that gonorrheal ureth-

ritis is frequent in women, but occasions so few symptoms and so little discharge that it is often not recognized and passed over unnoticed. The cervix is generally the seat of primary infection. The diagnosis must be made by the microscopic findings. With a suppurative cystitis associated with urethritis of gonorrheal origin, the cystitis is probably from the same cause. Cystitis is infrequent, since the micro-organisms do not readily penetrate the intact mucosa. The catarrhal type is never due to pyogenic organisms, of which the gonococcus is one. Treatment may be carried out in the office of the physician. Careful diet and salines are necessary. Much clear water and salol with hexamethylenamine are to be given. The uretha, and bladder when involved, should be irrigated with a watery solution of a reliable antiseptic. Boracic acid in acute cases, and iodine later are recommended.—Medical Record.

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Action of Digitalis.—Von Leyden, in *Therapie der Gegenwart*, deprecates the tendency to prescribe digitalis as soon as symptoms of cardiac incompetence occur. He says that tolerance soon follows the use of digitalis, and when more serious symptoms of cardiac failure develop, no results are obtained from its administration. Measures tending to secure both physical and mental rest for the patient should be employed before the use of digitalis. Von Leyden is of the opinion that digitalis has a greater action upon the left side of the heart, and so may fail to benefit those patients suffering more from a failure of the right heart. In fact, he believes that digitalis may even be harmful in these cases. He also thinks, that due to the action of digitalis principally upon the cardiac muscle, there will be little or no effect in advanced myocarditis or when valvular disease is associated with myocarditis. Von Leyden has not seen much benefit derived from the use of digitalis in fever, in fact large doses seem to be actually harmful. He prefers infusion of digitalis, and gives it in smaller doses than those usually prescribed, and discontinues it when its therapeutic effects have been obtained. He believes that digitalis in pill form is untrustworthy and that the tincture is uncertain. Digitalis leaves vary in strength according to where grown and the time of gathering. Age also diminishes their strength.—Medical Standard.

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All diabetics whose urine shows a marked diacetic acid reaction should be placed on sodium bicarbonate. As much as three to four ounces may be given daily.—Medical Summary.

THE JOURNAL OF THE Kansas Medical Society.

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KANSAS CITY, KANSAS, JULY. 1911.

No. 7

THE PHYSICAL SUPERVISION OF THE SCHOOL CHILD.

O. P. DAVIS, M. D., Topeka, Kansas.

President's Address, Delivered at the Opening of the Annual Meeting of the Kansas Medical Society at Kansas City, Kansas, May 3, 1911.

MR. CHAIRMAN, MEMBERS OF THE KANSAS MEDICAL SOCIETY, LADIES AND GENTLEMEN:

I desire to take this opportunity to publicly thank my fellow members for the honor of presiding over the Kansas Medical Society during the past year. It makes a page in my life to which I shall often turn in happy retrospection. But the office which I hold and which I am soon to relinquish imposes at this time a task on me and an infliction on you, in that I must now formally address you.

Many themes touching medical policy, ethics, and professional economics suggest themselves as appropriate for the occasion; but I am constrained to leave such topics, to others, and to invite your consideration of a subject closely related to public medicine, that is now of vital interest to our profession and to the state, namely, "The Physical Supervision of the School Child."

The state recognizes the necessity of having an intelligent and enlightened citizenship. For this reason schools are maintained at public expense, and all children, within certain limits of age, are compelled to attend school. A parent who detains his child from this requirement is considered an offender against the public good and is punished. His parental rights of control of his child are regarded as subservient to the vastly greater rights of the state. Poor or rich, every man's child must go to school, and submit himself to that process of intellectual development considered essential to the functions of citizenship which will later devolve upon him.

We all agree to the strict and universal enforcement of this requirement. We deplore that unlettered ignorance that characterizes some communities and nationalities, and are wont to attribute crime, intemperance, poverty and many other of the evils of society largely to the state of illiteracy with which they are so often found associated.

But the state has stopped short of its duty to the child when it provides only for his mental culture and makes no provision for a systematic physical development of that same child. In our country much energy is bent on providing splendid quarters for housing the pupils. Increasingly liberal compensation is being awarded those who teach. But little or no consideration is being given to the fact that there must be sound bodies if there are to be sound minds in them, and that the body must have first consideration in any educational system.

This consideration of the child's physical status as a factor in his education has come to have some attention in recent years, but only in a half-hearted, unsystematic and inconsequential way. Whatever is done is done for all alike. The individual child has not been studied, nor has any inventory been taken of his capacity or of his weakness. If the child is slow or stubborn or indifferent, he is either punished by being "kept in", or is dealt with in some other such way more likely to aggravate the trouble than to remedy it. The possibility that some physical infirmity may enter into the case to explain the child's difficulties has never seemed to penetrate the brains of the school authorities. They lose sight of the possibility that the child may be poorly or insufficiently fed, or inadequately clad, and that these factors may account for that in the child which is commonly attributed to innate perversity and lack of sense. While the state is providing for the child along one line, why is she so blind to correlated conditions equally important?

The truth of the matter is that our school authorities are creatures of just one idea. That idea is that schools are merely for the teaching of certain traditional branches handed down from times prehistoric. Let the child but master these and he is proclaimed as educated; let him but fail of coming up to this required standard of attainments and he is declared a dolt or an ignoramus. The teachers themselves boast such an education and they guage the child by the inch-measure of their own attainments. The average school teacher has little or no other kind of knowledge than this handed-down kind. The ordinary school-ma'am knows nothing about the human body, or at least

not anything to speak of. How then can she apprehend the physical basis in her pupil on which must be rested the educational superstructure?

Our school authorities are not particular along these lines. They even employ numerous teachers who are adherents and promoters of that "new-old witchcraft, self-styled, christian science;" persons who deny that a child, or any one can be sick, or can suffer, or can have anything the matter, because all these things, forsooth, are unreal. How may we hope to have any proper consideration ever given to the matter of physical education when such an imposture is tolerated and its votaries set in charge of the growing and pliable child?

Thus, school teachers themselves, knowing nothing about their own bodies, cannot be expected to recognize even the most glaring bodily deficiencies of their pupils. The schools in which they themselves got their preparation for teaching do not inculcate such knowledge, or if they do, it is in a very superficial way, and with no practical purpose in view as to the application of such knowledge to the needs of the teacher. There is very little special preparation made for teaching these days. The pupils of the very schools of whose shortcomings we are today complaining, will next week or next year be recruits in the army of teachers of these same schools. Teaching is too often used as a stepping-stone to matrimony or some other line of activity, or at any rate is too lightly treated as a vocation.

The teaching profession must be put on a different plane. It is necessary for the teacher to do more than teach the conventional subjects found in the present day curriculum. The teacher must be able to study and know the child behind the book, from top to toe, inside and outside. The child's body is the basis of all his being and must not be neglected in the elaborate process of development. Thus the teacher must be given special training along the line of recognizing physical defects in the child, his general aspects and proportions, relations of parts, etc. Just as an artist studies form and figure, so must the teacher become a student of the form and figure of the average child. Thus, will she be prepared to recognize important deviations from the normal. She will see at once a misshapen dental arch, a narrow or flat chest, a slovenly or ungainly carriage. She will note deformities of feature and of limb, impediments of speech and abnormalities of the special senses. And last of all, but not least in importance, by her daily association with the child, she will be able to recognize disturbing factors influencing the child's

development, perhaps from the home side, such as parental neglect or even abuse, unsanitary environment, insufficient clothing, or inadequate food. Who will deny that the state, looking out for herself when she looks out for the child, should ignore these latter essentials to the development and education of her future citizens? Moreover, is it not a pity that we should compel the attendance of the child at school when perhaps he is hungry or cold, or sensible of his own personal disadvantage when subjected as he is to a superficial, if not a deep comparison with his more fortunate associates. ?

But it will be argued that to place this responsible task upon the already over-busy teacher is too much. The teacher, it will be asserted, cannot be expected to take a course in medicine or even in medical diagnostics. Her functions, it is maintained, is to impart knowledge and to train the mind. I reply that while that has been her traditional duty and limitation, we must enlarge her sphere, even though we take something away that has heretofore helped to overfill it. Nor is the impossible to be required of her in the way of diagnosis. Many of these things which she will be expected to notice, if present in the school child, are easy of detection, if only in a single instance, pointed out to her. Many of them are already the objects of her commiserating, yet silent observation. Crossed eyes, difficult or squinting or reluctant vision, bad hearing, mouth breathing, stooped shoulders, flat chests, etc., have all along been objects of her pitying notice.

If she but opened the child's mouth, it would not require any special diagnostic acumen to recognize sometimes therein enlarged tonsils, decayed and irregular teeth, deformed palate, etc. Sufficient examination of sight and hearing to set on foot a more detailed and corrective investigation is not beyond the capacity of any who are otherwise competent to teach school, especially if some preliminary practical instruction along these lines were given to such teachers. The advantage of the teacher's doing this work of inspection is quite obvious. The pupil is under observation more or less continuously by her, and conditions of a transitory nature are then possible of separation from the more permanent deviations from normal which constitute deformity or defect.

The teacher may also, by regularly taken measurements and weights, study the growth and nutrition of the child. Every school if not every school-room, should possess accurate scales and measuring devices, and these instruments should be employed at least once a month, and a record kept of the data obtained.

Chest measurements should also be taken, and possibly other information along these lines might well be elicited, filed and made part of the school child's record.

It is clear, that the observation thus made of the child's physical condition and development may lead to a very timely and effective correction of any defects that may be discovered. But this correction is, of course, rarely to be instituted by the teacher, but rather by the family physician or by some competent specialist recommended by him. The teacher's duty is not to refer the child to the physician of her own choice, but to show the parents the condition of the child and with tact and persuasion get them to take the child to their own medical adviser. She should herself accompany the child if possible, and thus make clear the grounds on which the steps are being taken. For the best of physicians might in some cases, after a single observation, fail to discover the conditions that have been disclosed only by a series of observations and on intimate association. Especially is this true of nutritional disorders often discovered only after a careful study of the body weight. Thus the family physician will be able to confirm the data submitted to him, and no doubt often supplement them by others ascertained through technical methods, or revealed in the light of his wider experience. It is then his function to set on foot a line of procedure designed to correct these conditions and approximate the child to the normal. This often requires the counsel and cooperation of specialists; but rarely is such aid to be sought except at the suggestion and direction of the family physician. Of course in cases where there is no family physician or expressed preference, resort may be had to any physician of good repute, or, when indigent, to some physician compensated by the authorities for such duties.

In cases of defective physique, suggesting the need of special physical exercises, the school authorities should provide a director and suitable facilities for meeting this requirement. What if it is expensive? What if it does require the establishing of a new department? Is this not as important a field for investment as any other? We have much of our money spent on certain educational refinements and luxuries, such as the various phases of manual training, clay-modeling and other frills and gimcracks in the curriculum. Let us have some such downright necessities as these I have suggested as well, or else dispense with a few of the luxuries in our system.

The child's physical welfare in the schools cannot be conserved by any less thorough and unremitting scheme of super-

vision than this that is here suggested. We hear much about medical inspection of the schools. There is a paroxysmal outburst from certain sources from time to time, the dominant note of which is that the children of the schools must be lined up and submitted to the inspection of certain selfappointed "big wigs" who are possessed of the fixed delusion that all the plagues of civilization spring from the failure to trim or scrape or pull the particular organ possessed by the child over which the gods have appointed them to preside. Therefore they read papers, issue propaganda and get the ears of school boards and boards of health, and one bad night when nobody cares what may happen, they put their measure through. Yet what do they do? Nothing but to advertise themselves and to stir up a little dust of self praise, to and line their purses with money, which after all are the ends they have chiefly in mind. It is absurd to expect that any good can come of this kind of school inspection. How superficial must necessarily be this wholesale, unstudied and undeliberate method! How disjointed and unbalanced the scheme, since only one field of investigation is approached and all the rest ignored, or left as the prey of other marauders who may take up the cue. No professional man is likely to make any considerable sacrifice of time to do the work well, yet for nothing, which should be done. It certainly can not be done by the plans and specifications of the self-appointed medical pirates who seize upon the existence of an acknowledged need and pervert it into an opportunity to promote their own selfish ends.

■ We have already noted the various phases of the child's physical development which demand persistent study and continuous observation. This study and observation must be systematic and articulate. It cannot be done by the hurried and occasional visitants, fitfully representing their several fields of activity, however astute and keen they may be as observers and analysts. The physician's legitimate activity in relation to school inspection consists, first, in skilfully handling the pupils who are brought to him by the parents and teachers, and second, in instructing and preparing the parents and teachers for the functions that under some such plan as this would devolve upon them. A properly arranged course of lectures could be easily provided for groups of teachers, with illustrative cases and types of children. These courses could be given by competent physicians skilled in various lines, and could be made simple and highly practical and effective. And still other courses of instruction could be arranged for parents along the line of home hygiene and the science

of judging children. Why should such an idea be considered impractical or visionary, when we consider that lecturers are going through the country teaching farm boys how to judge live-stock, and how to score points of excellence or fault? Perhaps the women's clubs could have their attention diverted on an occasional afternoon from Browning or bridge to the contemplation of the problem of the child as he is and as he should be. There is no subject on which men and women are so deplorably ignorant as on these important questions, touching their own lives vitally at so many points, and their children's lives. It would seem that the selfish instincts so dominant in other ways would assert themselves here and respond to what sane judgement imperatively demands. And I believe they will respond to a right appeal, and the state and the school and the child will be benefitted by that response.

ACUTE INTESTINAL OBSTRUCTIONS.

DR. R. C. LOWMAN, Kansas City, Kansas.

Read before the Kansas Medical Society, May 4, 1911.

Acute intestinal obstruction is one of the most serious conditions, that we, as practitioners, are called upon to treat, for we all know that the outcome is certain death in the mechanical form, unless relieved by our art. We also are well acquainted with the fact that the earlier a diagnosis is made, and the sooner proper treatment is instituted, the better the prognosis is for our patient. On account of the danger of the procrastination all too common, it is wise to have the symptoms and the diagnostic points at our finger ends. Another melancholy fact, also well understood, is that in the majority of cases the surgeon is called upon to operate too late, after days of useless enemas and pernicious purgatives; only to find the bowels black and gangrenous, and the patient a victim of septic absorption and beginning peritonitis. Morphine has probably been the cause of more deaths in acute intestinal obstruction than any other agent, for the practitioner is lulled into a false sense of security by the cessation of suffering, while the gangrene, septic absorption and the soul of the patient all go marching on.

We should always try to eliminate ileus before giving morphine in any case of acute abdominal pain, and if the pain soon returns and demands another dose, we should redouble our efforts to make a correct diagnosis.

As to the symptoms, one of the first is the absolute constipa-

tion. The obstruction is complete, even to the passage of gas, except in some of the milder cases of invagination. By the use of an enema, we may obtain a fecal discharge after the stoppage takes place, but this represents only the bowel contents below the obstructed point, and additional enemas are futile.

Vomiting is very common and begins earlier, and is more frequent and persistent, the nearer the obstruction is to the stomach, and may be somewhat delayed if in the colon or sigmoid. The vomitus becomes more and more feculent, and finally has the odor and appearance of liquid feces, though these characteristics are considered due to chemical changes taking place in the proximal part of the canal, and not caused by retrogression of feces from the distal portion.

The stethoscope often gives valuable aid in the diagnosis. The borborygmus can be heard by the instrument and followed to the obstruction, where it stops. After peritonitis supervenes and the intestines are paralyzed from distention, these sounds stop. They are also prevented by morphine, and thus an important diagnostic aid destroyed. Pain is generally intermittent—so called colicky—especially at first. It is produced by the violent peristaltic action of the intestines trying to force their contents past the obstruction, and, of course, correspond in time with such waves. The location of the pain gives very little clue to the seat of the obstruction and generally pressure does not increase the pain, and, in fact, may give some sense of relief. The violent peristaltic waves may often be felt and seen.

Tympany is almost always present, except possibly when ileus occur high in the digestive tract, and is generally quite marked if it is at or below the ileocecal valve. A fullness at the umbilicus indicates distension of the small intestine, while depression in the loins shows collapse of the colon. As tympanites is a symptom of peritonitis, a disease which simulates ileus closely, we should not place too much reliance on it as an absolute diagnostic sign. In peritonitis, the pulse is rapid and wiry from the first, while in ileus it is first softer and fuller, and the temperature is normal or nearly so in the absence of complications, while in peritonitis there is nearly always more or less fever. Rigidity of the abdominal muscle indicates peritonitis, also extreme tenderness on pressure, and persistence of considerable pain between paroxysms of more severe pain. Late in ileus, peritonitis frequently supervenes and the the symptoms of both conditions intermingle, and a differential diagnosis is impossible and not often necessary.

In intestinal obstruction a tumor mass is sometimes felt,

especially in intussusception. An absolute diagnosis as to the seat and character of the obstruction is possible in only forty or fifty per cent of the cases before operation, but that does not make much difference, as the indication is to relieve the obstruction, no matter what the causative factor may be.

In the classification of ileus authors vary considerably, some including cases of temporary obstruction, and others including only those where there is a mechanical obstruction to the progress of the intestinal contents. Thus, a coprostasis may be produced by an adynamic form of ileus, meaning without power, and is a result of a paralysis of a larger or smaller amount of the intestinal canal, from several causes, as paralysis from extensive operations on the mesentery; paralysis of a loop returned after prolonged strangulation; injuries to the spinal cord; reflex paralysis as that produced by the passage of gall stones, renal calculi, compression of an ovary, or severe torsion of a tumor pedicle or strangulated omentum. We may have a septic paralysis from peritonitis, appendicitis, cholecystitis, salpingitis, and embolism of a mesenteric artery.

Uremic ileus may occur as one of the many uremic symptoms. The vomiting and coprostasis are especially likely to happen, but we do not have other important symptoms of mechanical ileus, as increased peristalsis, tympanites and circumscribed areas of dullness. An examination of the urine shows kidney disease, yet we should remember that a small amount of albumin may be present in mechanical ileus. Another occasional source of error is the fact that tabetic crisis often mimic true mechanical obstruction. Pain, nausea, vomiting and coprostasis are frequent and may continue for days. Other well known symptoms of tabes should be sought and a proper diagnosis made. Acute hemorrhagic pancreatitis often presents the clinical picture of acute intestinal obstruction from mechanical causes, but the primary pain and collapse are generally much more severe, tenderness on pressure more marked, and upper abdominal resistance much greater than in mechanical ileus.

Another rare form of ileus is the dynamic where there is a tonic spasmodic contraction of the circular coats of the bowel, producing an obstruction, and lasting sometimes for days. Its most common cause is poisoning by lead or tyrotoxon.

We now come to the consideration of the most important subdivision of ileus, namely, mechanical ileus. This is the form that causes the deaths when neglected, and is the kind our mind ordinarily reverts to when we speak of intestinal obstruction.

Probably the most common cause met with by the general practitioner is external strangulated hernia. It is very strange that so many of these herniæ are let drag along for several days until the bowel is rotten and gangrenous. If postural treatment and moderate taxis do not soon succeed in reducing these herniæ, the sooner an operation is performed the better. Another important point in connection with this subject is that a small knuckle of intestine may be strangulated in one of the various apertures and the patient and practitioner know nothing about it. This is especially likely to happen in elderly obese females at the femoral ring.

The internal forms of strangulation are numerous and often difficult of recognition or differential diagnosis. The intestines, in greater or less amount, may slip into congenital subperitoneal pockets near the inguinal canal, femoral canal, retroperitoneal passages, duodeno-jejunal, external sigmoid and retrocecal. Nearly the entire intestinal canal may slip into one of these re-traperitoneal fossæ and be behind or external to the peritoneum. In case of right or left duodenal hernia, the orifice is bounded in front by vessels; the superior mesenteric artery in the right duodenal form, and the inferior mesenteric vein and left colic artery in the left. Therefore if the neck of the sac is divided freely, these important vessels will be wounded. Often in these cases the contained intestines will be found twisted around the entering and returning loops, and, by untwisting, the gut may be withdrawn gradually. Sometimes the neck can be stretched a little by traction with the fingers, or a small nick can be made at a point where there are no vessels. After withdrawing the gut, the neck must be closed by carefully placed stitches to prevent a recurrence of the hernia. Cases of hernia through mesenteric slits or openings in the broad ligament have been reported and are ordinarily easily reduced by enlarging neck of sac at a point free from vessels. Herniæ through the foramen of Winslow are very difficult of entire reduction.

Another unusual cause of ileus is Meckel's diverticulum. This structure depends on the failure of the omphalo mesenteric duct to close and is usually found attached to the lower portion of the ileum about three feet above the ileocaecal junction, but they may arise any place between the duodenum and the cæcum. The diverticulum may resemble very closely the normal intestine and is sometimes difficult of recognition. It produces obstruction by the free end becoming attached to the abdominal wall, to the mesentery or some other point within the abdomen. The

attached end should be freed and the remains of the diverticulum removed close to the intestine, remembering that the lumen communicate with the interior of the intestine.

A comparatively frequent cause of mechanical ileus is obstruction by bands or ligaments. These bands may be found in any part of the abdominal cavity and vary in size from mere strings to broad ligamentous structures, and often the patients give a history of severe injury or previous intrabdominal inflammatory condition.

Ordinarily the seat of obstruction is easily found, or following the dilated bowel will surely lead to it. The band should be entirely removed, if possible, and no free end left to contract adhesions and cause future trouble. We should also remember that there may be more than one band and not close our wound until all are freed, unless time is an important item. If the case is seen late, the walls of the bowel underneath the band may be very rotten and almost perforated. When the band is cut the sudden rush of gas and intestinal contents may cause perforation and flood the abdominal cavity with septic material. This should be guarded against by gauze packs and intestine closed above by assistant's fingers.

Obstruction by gall stones or enteroliths is sometimes encountered, and ordinarily is not diagnosticated until operation. They generally cause symptoms of chronic or intermittent obstruction at first, later becoming acute, and may occasionally be palpated or localized by the X-Ray. One peculiarity about these cases is that acute obstruction may be caused by a stone smaller than the intestinal lumen. The foreign body in this event causes a spastic or dynamic contraction of the circular fibres and thus an acute obstruction supervenes.

These are the simplest cases that come to the surgeon, for there is no arrest of circulation in the intestine as in other cases of mechanical ileus. Results though are not nearly so good as they should be and the cause is the usual one of delay. Early cases should all recover; the more advanced, the more septic poisoning present and the worse the prognosis.

Intussusception is more common in children than in adults. Its earliest symptom is pain coming on suddenly and usually referred to region of the umbilicus. The pain is very severe, but may pass away in a few hours and then recur. Vomiting soon begins and shock is generally marked. After a few hours, bloody mucus may be found in the stools, and this is an important diagnostic symptom as it does not occur in other forms of obstruc-

tion, except occasionally in knots and twists of the bowel, yet it can occur in dysentery and rectal polypi. The intussusception may and does appear at the anus in about six per cent of the cases.

A common sign is tumor which occurs in about sixty per cent of cases. It is most often felt in the right iliac region, and may be felt in the rectum. It is generally cylindrical, is movable and not very tender, and often changes its situation. In event of failure to find it by abdominal examination, a conjoined rectal and abdominal examination should be made. It is thought by some that invaginations often occur in children and are spontaneously reduced, and is the explanation of a good many of the severe colics of childhood. If it remains invaginated, however, adhesions may occur as early as the second day. Rarely a cure is affected by gangrene and slough of the intussusception and its discharge from the anus. This does not happen in more than 2 or 3 per cent of the cases. The principal diagnostic signs are sudden attack of severe pain, collapse, recurring character, bloody mucus in stools, and sausage shaped tumor.

In the treatment, many physicians advise inflation by air or pressure by water. If this measure is tried, it should be done in the first 12 or 14 hours, and not used too forcibly, nor persisted in for so great a time as to exhaust the patient. After this period of time has passed, or after the failure of hydrostatic pressure the treatment is immediate laparotomy with reduction of the invagination by taxis. If this fails because of adhesions, we may open the sheath and excise the intussusception, or remove the intussusception with end to end or side to side anastomosis, or do an intestinal anastomosis or in desperate cases, a simple enterostomy.

Volvulus is a cause of ileus. In volvulus we have a twisting of the intestine upon itself for more than 3-5 of a circle and we have the usual symptoms of obstruction. Pain not so severe at first and intermittent, coprostasis; vomiting in over half of the cases, though it is not always an early symptom. Volvulus occurs most often in the sigmoid, and frequently the twisted distended coil can be recognized by its shape through the abdominal wall. After opening the abdomen, the twisted coil must be found. It is generally best then to bring it outside the abdomen and examine it closely to ascertain, if possible, the cause of the volvulus. If easy to untwist, do so at once and return; if difficult, the bowel may be incised and its septic contents evacuated, when reposition will be found easier. If there is any tendency to recurrence of the twist, the bowel and mesentery may be sutured to the abdominal wall in such a manner as to hold the intestine in an approximately correct position.

Post operative ileus is not uncommon, and of this form we have two general classes— adynamic or paralytic ileus, and mechanical ileus. Adynamic ileus is due to intestinal trauma and paresis, exposure, peritonitis, and over distension of the intestinal walls. Mechanical ileus is caused by adhesions to raw surfaces, transfixion of the intestine while closing a wound, incarceration of a loop in a hole in the omentum, or mesentery, catching of an intestine between the margins of a wound in vaginal hysterectomy. Adynamic ileus is most often due to peritonitis, and when so caused is very difficult of recognition. When not so caused, diagnosis is easier, the symptoms being inability to secure a movement of the bowels, together with pain, meteorismus, and vomiting, with little or no rise of temperature.

TREATMENT. In treatment of mechanical ileus, the important point is early operation and removal of the mechanical obstruction. A positive diagnosis is very necessary, of course, and the various symptoms should be gone over carefully and accurately, yet if a diagnosis is not positive, it is much better to operate and find one's self mistaken than to wait for fecal vomiting; operate and find gangrenous intestines and a peritonitis. Mistakes are made frequently in differentiating mechanical obstruction from crises of locomotor ataxia, gallstone and renal colic, appendicitis, perforation of the stomach, intestine and gall bladder, peritonitis, acute pancreatic fat necrosis, and torsion of tumor pedicles.

In preparing the patient for operation, the stomach should be thoroughly washed out for its often contains a surprising amount of dark septic fluid which not infrequently has been the cause of the patient's death by being aspirated into the bronchial tubes during the act of vomiting while under the effect of the anæsthetic. Gastric lavage removes this septic material, prevents a certain amount of absorption, and favors removal of the same sort of material from the upper intestine. The only thing that can be said against the use of lavage is that it often apparently improves the patient's condition for a time and thus leads to further procrastination.

The incision should be made in the median line in the great majority of cases, and the head of the cæcum located first. If it is much distended, the obstruction is in the large bowel; if not, in the small. If there is a history of past inflammatory trouble or operative interference, the obstruction should be sought at these places, remembering the various hernial orifices, the upper abdomen and especially the pelvic region. The whole hand may be

introduced, if necessary, for the time saved by a quick and thorough search more than compensates for the extra traumatism. If the point of obstruction is not found in a few minutes, it is wise to let a considerable portion of the bowels escape, covering them quickly with hot towels, and follow the distended coil to the seat of trouble. Then the septic material should be let out of the distended bowel through an incision on its convex surface, the incision closed by a double line of sutures and the abdomen closed. Time is a very important element in these operations and in the most severe and collapsed cases the safest procedure is to make a small incision through the abdominal wall, select the first distended coil which presents, and which is usually the proper one, suture it carefully to the edges of the abdominal incision, place a purse string suture near the center of the exposed bowel, make an incision inside this purse string suture, pass a glass or rubber tube into the bowel, tie the suture tightly around it, and thus drain away the septic intestinal contents, limiting their absorption and relieving the circulatory stasis in the intestinal wall. Many of these cases have to have a second operation and the whole procedure appears like halfway surgery, but it is only recommended in desperate cases, those unable to stand any extended operation, and indeed, may be performed under local anæsthesia.

In conclusion let me urge upon you the importance of an early diagnosis in the cases of mechanical ileus in order that our patients may have a better chance to live, and our own self respect increased.

DISCUSSION.

DR. J. T. AXTELL, (Newton): If the general practitioners over the country could just learn to diagnose ileus in its inception, there would be a great many more lives saved. I really do not know anything more important than that. It is quite too common a thing, for physicians when called to treat a person suffering with pain in the bowels, to whip out the hypodermic and administer a dose of morphia before finding out just what is the cause of the trouble, and it is just as common to administer a dose of physic in case the bowels are not moving as they should do. In many such cases such treatment is the very worst thing that can be done. Then there is still another thing: If the physician does not give a physic in a case of appendicitis, which causes the obstruction, he may give a large rectal injection, and force a great quantity of water into the abdominal cavity. Those, it seems to me, are three very grave mistakes that the general practitioners make, and I have to confess that I have made them, and plenty of them, in my career. We do not always diagnose ileus in time.

The tenor of this paper it seems to me was right all the way through. My own practice has been in these cases of acute obstruction, in making the incision to go just through the rectus muscle on the right side, because I find at least two-thirds of these obstructions are located on the right side, and if I go just a little bit to the right, I think I have a better chance to find out just where the trouble exists. However, I have had a case within the last month, that was found out to be Meckel's diverticulum with strangulated hernia, and had been neglected for 40 hours before the operation, and the intestines were so enlarged, it made a very large amount of distended

small intestines and I was obliged, before I could get down to the place and find out where the obstruction was, to drain off the fecal matter from the small intestines, which I found to be a wonderful help. Oschner recognized that as being a necessary work. It is something that we do not like to do, and do not do it, if we can possibly avoid it, but it will be of great assistance in the operation for relief. If you have a large person, with a great distension close to the ileocecal valve, the small intestines become as large as your wrist, and the draining off of the fecal matter, renders the operation of finding the obstruction much easier.

I wish to emphasize the fact, that it is a very important thing to be able to diagnose ileus properly, and not to give morphine or physic or even injections when they are not indicated.

DR. O. D. WALKER, (Salina): This paper was very interesting to me at this particular time, because just two weeks ago I was called to see a case of acute obstruction, the patient being a little child of 8 months. The Doctor who first saw the case diagnosed it as a case of intussusception, but there could be no tumefaction made out. The child was in great shock, and only partially conscious. It was in the night time, and it was thought best, because we could not make out just where the obstruction was, to wait a little while. The next morning, a mass of tumefaction could be made out in the right side in the region of the appendix. An incision was made at this point, we found that the ileum, together with the cæcum and the appendix were invaginated into the colon as far as the transverse colon. It could be reduced without much force. The appendix, however, was damaged so much by this obstruction it was deemed best to remove it, the bowel was wrapped in warm normal salt solution and seemed to return quite to the normal. It was considered safe to drop it back into the abdomen without any further operative procedure. The child made a very nice recovery and the shock seemed to be reduced and to pass off almost immediately after the child came out from under the influence of the anæsthetic.

Now, personally, I do not like the idea of inflating the intestines either with water or air. I do not think it is good surgery. I do not believe you can tell when you have reduced your intussusception, and if you use much force, you may break through the weaker part of the bowel and complicate the case very much.

While children do not stand operative procedure very well, I can say in this case referred to, the child suffered little from shock, in fact, its condition was better when it was taken off of the table than before the beginning of the operation.

DR. WILKINSON, (Kansas City, Kansas): I do not believe anyone can criticize what has been said previously. I merely want to urge further that we proceed early in the majority of these cases. I think also, that too much operating has been done in many of them. In the cases such as the one cited by Dr. Axtell, we can save more lives by draining the bowel and stopping further work than by prolonging the operation, in an attempt to cure the obstructing factors themselves, at the same sitting. The same applies to strangulated hernia cases. Many of them are gangrenous and in too bad general condition, when they get to us to stand any prolonged work. We can relieve the strangulation, drain the bowel and get out saving more extensive work for a later date when the patient is in better shape.

DR. J. L. EVERHARDY, (Leavenworth): The paper is certainly classic, and I can add nothing to it except to bring up one point for consideration. This is really an acute obstruction, and we call it acute when we first meet it. It is due to an obstruction in the colon. There was a kind of a hobby with Doctors at the Soldiers' Home, where in post-mortem they find an obstruction supposed to be due to strangulated hernia, and accompanying it an atrophy of the colon. I have done many post-mortems where I found a long chain of fæces that the colon had been unable to remove, and where the case was operated upon, or was not, this condition was found.

Of course this condition is acute when we find it, though it may be due to a chronic condition of atrophy of the colon.

DR. LOWMAN, (Closing the discussion): In regard to this condi-

tion of distended bowel, the method of procedure outlined in the paper I find of great aid. It is recommended as routine procedure by a great many men of much experience in order to eliminate the septic contents of the bowel. The stasis in these cases is caused largely by the absorption of these toxins and septic matter from the interior of the bowel. By draining that away you remove of course, to a great extent, the source of the infection.

Monyihan has a very successful way of doing this. He has a tube, which I think is made of glass which he inserts in the intestinal incision and empties the bowels.

Regarding the use of water for intussusception, it is not indicated except in the first ten or twelve hours. After that time, it is not recommended at all. I have never known of a case of intussusception being reduced in that manner.

I might mention an interesting fact told me the other day by a physician who had had large experience in post-mortem work, especially in an institution where there were a number of colored children. They found post-mortem intussusception in a large number of those colored children who died from any cause.

I believe that is all I have to say, except to urge again the importance of early diagnosis and to guard against this matter of procrastinating. However, if I am called to attend a man with hernia, I usually do not want to wait, and if I cannot reduce it by moderate taxis, and put the bowel back in place, in a short time, I advise an operation, and if the patient does not consent to it, I advise him to get another doctor.

DIAGNOSIS.

E. E. HUBBARD, M. D., C. M., Shawnee, Kansas.

Read before the Kansas Medical Society, May 5, 1911.

Since I chose this subject, I have had doubts as to the possible interest it might create.

I am hardly expecting to be the means of instructing any one to any serious extent, but hope to stir up discussion enough to beget an interest.

I have limited my title to one word, because I will be at liberty to discuss it from any direction, or any phase of it. The main idea will be to make a plea for more and better diagnosticians, and to discuss the means of becoming such.

The word coming from the Greek *dia*—and *gnosis*, means, to know through, or to paraphrase a little, it means "To have a thorough knowledge of". All preach diagnosis these days, and few practice it.

I have known several men who make a business of blustering into the presence of a patient and writing a prescription or, administering drugs, with no investigation whatever; with the idea of appearing to KNOW their business. I suspect that no one will deny that a large percentage of practitioners are very poor diagnosticians.

A few illustrations may not be amiss. Let us begin with that Old, Old Chestnut, Rheumatism.

About ninety-nine times out of a hundred, when a patient complains of pain, every body and the Doctor says, Rheumatism.

Muscular Rheumatism, rheumatism of the heart, myalgia angina pectoris, etc. Poor old rheumatism, like charity covers a multitude of sins; but it saves gray matter and satisfies the patient, who has an inherited respect for this lot of nondescripts.

The question, "what is rheumatism," intrudes itself"? or perhaps what "is it not"? Is it uric acid in the blood, or a deposit in the tissues, or it is a bacterial invasion?

It is probably nine hundred and ninety-nine times, neither, and perhaps never the former.

I once heard a talkative member of a medical society, say that he believed rheumatism to be a germ disease, and that he believed urotropin to be the best remedy, because it would dissolve uric acid in a test tube. There is much talk of rheumatism of the heart, and of angina-pectoris, but there is absolutely no constant pathologic condition found for either. To my mind angina-pectoris, as an entity, is a phantom.

The name only means pain, and a sense of suffocation in the chest, and since no constant pathologic condition has ever been found following fatalities from this so-called cause, there is no reason for clinging to a mere relic.

All know that severe pain produces shock and death, as observed in this condition, and since there is no constant pathology of angina-pectoris, and as a rule, none of any sort ever found, it may be surmised that the cause and location of the condition have been mistaken.

I am going to maintain for arguments sake, that all of those conditions called rheumatism, myalgia, angina, etc., are neuralgia. Angina-pectoris is intercostal neuralgia of severe degree, and all these other aches and pains called rheumatism are plain neuralgia, and can be proven in much the greater percentage of cases by tracing the pain over the course of the nerve afflicted. The next intruding question is, "what is neuralgia"? Literally, it is nerve pain, which is not very diagnostic. Some have wondered if it might be rheumatism of the nerve, but since rheumatism is not an entity, we must look farther. If we notice carefully, we will observe in all of these cases of painful affection, that the patients bowels and other eliminative organs are performing very sluggishly, seeming to make it reasonable that there is a connection between retarded elimination and the pain.

The changes have been rung on toxemia and auto-intoxication, until they may seem to belong to the chestnut class, but I

am more and more inclined to the belief, that if our elimination could be approximately perfect, we might live as long as the trees; whereas, the accumulation of ptomaines and leucomaines in the tissues and fluids of the body, at first inhibits all the vital forces and finally brings about dissolution.

In the case in hand these ptomaines and leucomaines circulating in the body fluids, first comes in contact with the sympathetic nerves in the capillary vessel walls, and lymph spaces causing an irritation of the nerves, which produces a contraction of the capillaries supplying the nerve trunks, thereby producing anemia of the nerve trunks, which immediately cry out in pain for more blood.

This may seem far-fetched, but only supply the called for blood by producing hyperemia, by either hot applications or Biers method, or massage, and see how soon the pain ceases.

To return to elimination. Pawlow and others have demonstrated that even hunger is caused by the elimination of putriferactive waste into the alimentary canal, thereby, causing a toxic condition and producing a call for a diluent for the deleterious material, in the form of food; by that means preventing a more serious poisoning.

This seems to be proven by cleaning out the alimentary canal, and keeping it clean, and as long as it is kept free from the presence of excrementitious material there is no hunger.

I could site a number of cases of poor health, chills, fever, etc., all of which cleared up perfectly after cleaning out, and keeping clean. This is better than letting it "Run into Typhoid Fever."

To proceed with what I may call legendary diagnosis, made because it is easy, I will mention malaria:

How many practitioners tell the majority of their patients in the fall of the year that "It's malaria hanging round"? Another weird something, is typhoid-malaria, or typhoid-malarial fever.

I know a physician who made the latter diagnosis and appended the same to the death certificate, where the patient gave all signs of renal insufficiency, showing albumin and casts in the urine and dying in uremic coma.

Another physician made a diagnosis of inflammation of the bowels at a distance of ten feet from the patient. His successor found the patient suffering with lobar pneumonia.

A short time ago I had a very practical surgeon tell me that the discharge from a suppurating leg had changed in appearance,

and had become green, and asked very anxiously, what it meant. He had never heard of the bacillus pyocyneous, which often engrafts itself on a previously existing suppurative process. Another surgeon wanted to amputate a leg after symptoms of tetanus had set in.

Central nervous lesions are most difficult to diagnose, and require a very thorough knowledge of the anatomy and physiology of the brain and cord. A very good example of very poor diagnostic ability, is that of a man of perhaps thirty-five years of age, in the hands of a man of twenty-six years of practice, who had not recognized typical symptoms of appendicitis which showed from the beginning, and went to tumefaction, rupture and shock, with a red area as large as a dollar, over McBurneys point, and finally foecal vomiting, when the attendant concluded it was intussusception.

Why do we observe men running to hobbies; one man finds appendicitis at every turn, another finds gall stones, another pus-tubes, another ectopic-gestations, etc., etc.

I know a man who has a fine microscope. He can do one thing with it; find gonococi. Another has a fine static machine; he can use the spark and the breeze.

The reason for the hobby riders is that they study, and know, reasonably well, only one thing perhaps, and are always on the lookout for it, and they find it.

Guthrie in the Journal A. M. A., January 28, 1911, gives the views of such men as Rodman, White, Brewer, Binie, Howard, Kelley, Crile, Ochsner, Murphy, W. J. Mayo, etc., as to their ideas of the requirements for the making of a surgeon.

I might very acceptably appropriate all of these views to the use of this paper; for, to do surgery, of all else, one must be a diagnostician, unless he is willfully willing to do more harm than good.

An epitomized statement of the above mentioned opinions would be to the effect, that one must have a good common-sense education and common-sense enough to use it. He must then have a good medical education and supplement it by hard study and practice, and must not ignore anything in the line of medical knowledge and experience.

In other words he must be an omnivorous reader, and observer, and with all be very practical and not easily veered by the fads.

There is no reason for an individual to be a back number, or a block-head, if he will take from three to six good journals

and read them.

There are many very chaffy articles to be found in the journals now-a-days, and many men effect to become disgusted and stop reading, and take no journals at all. Others claim to be too busy to read. The chances are they are either too lazy or too ignorant to read effectively. Let me leave this with you. When one may know, it is a crime not to know.

DISCUSSION.

DR. J. W. BOLTON, (of Iola): There is no question but physicians err many times in the matter of diagnosis, and when a patient comes to us we will take their temperature, feel their pulse, examine their mouth, and let it go at that. There is no condition which probably presents more opportunity for false diagnosis, than that of malaria. I will relate a case which impressed this fact very forcibly upon my mind. It was that of a child, a girl about 10 or 12 years old, who had been in the hands of several physicians all of whom agreed upon a diagnosis of pulmonary tuberculosis. The mother related a history which indicated that the child had swallowed a tack about one year previous. The child had a dry hacking cough aggravated by a slight cold, regardless of this the mother surmised that the tack had something to do with her condition, requesting an X-Ray examination. The child was thin and anæmic when brought to my office, I applied the X-Ray, concluding that if there was a tack in the respiratory tract, it would appear readily, but the skiagraph revealed no evidence of a foreign body. I inquired into the history of the case very carefully and ascertained that there had been repeated colds followed by stages of fever and sweating. She had a temperature of 104 when I examined her, and I could find nothing else to account for her condition except malarial infection, and so diagnosed the case. The child recovered under anti-malarial treatment.

DR. H. BRUNIG, (of Hillsboro): I rather think we have got the most interesting paper at the end of our afternoon meeting, when most of the members have gone, certainly it should induce quite a discussion, inasmuch as the disease of rheumatism has been knocked out, although, not convinced, I still think there is such a disease. At least we have a rheumatic fever, and have a regular course of disease which follows a certain train of symptoms, and certainly cannot be disregarded. It may be such a thing there are cases that probably ought to be classified as rheumatism, or a mistake may be made both ways: They may be called neuralgia, or the neuralgic cases may be viewed as rheumatic.

I think however, that many times these mistakes have arisen from the patient and are not really the mistakes of the Doctor. We may have a patient complain of pain and simply think she is neurotic, and is detailing a symptom which has no pathologic foundation. We might as well call that rheumatism as well as anything, because we cannot tell the patient she is neurotic, or he is neurotic. I might say these diagnoses are made for the patient's benefit, and while the Doctor has not the opportunity to investigate and find out what he or she is really suffering from, as long as the patient gets well, anyway, the name does not make any difference. Often the doctor is censured, when he really does not deserve it.

Diagnosis is the most important field of the Doctor's activity, and the most important thing in making a diagnosis, is method. It would have pleased me greatly, if Dr. Hubbard had given us his method or routine in making a difficult diagnosis. Say, for instance, where the patient complains mainly of loss of weight, and strength without any obvious anatomical lesion. My method, is invariably as follows: First: Patient's complaints or subjective symptoms; let the patient do the talking, then ask as many relevant questions as possible including family history, personal history, occupation, etc. Then the physical examination, beginning with the head, eyes, ears, nose, mouth and pharynx; then the cervical region and thyroid and supraclavicular fossæ, then the lungs and heart, then the [various divi-

sions of the abdomen and sexual organs; then the extremities, then the reflexes, then the excretions. If gastric cancer is suspected, I also use what in Vienna they call the Rothan Kali test, to which they seem to attach a great deal of importance. This is a test of the saliva based upon the absence or presence of the cyanide contents of the saliva.

The modus operandi is as follows: Dissolve 6 grains of sesquichloride of iron in 20 drops of water, and 3 drops of H. cl; heat until color darkens slightly, then have patient spit on a piece of paper and pour near the spittle a drop of the test solution, and draw a streak of the test solution through the spittle; if it leaves an orange red or brown streak the test is positive, and indicates that the saliva is normal; if it does not react, the presence of cancer is suspected. This test will often fail, especially in tobacco chewers whose saliva is too dilute. In Europe they use a beaker to make this test, but the paper modification is much easier and cleaner.

DR. W. E. CURRIE, (Sterling): I have thought sometimes we are about as well off if we did not make known our diagnosis. I have had a good many patients coming to me for diagnosis of their peculiar troubles, and after advising them, I have discovered the next day or a few months after, they are having their vertebrae rubbed back into place, and all I get out of it is the diagnosis, so I am led to think that the better part of discretion is silence in the matter of diagnoses.

DR. HUBBARD, (closing discussion): I had rather hoped this would be discussed more freely, because I expected that perhaps I had run against a snag in saying that rheumatism was a fallacy, but it has been my opinion for several years that this is a fact, and that the old chestnut catarrh goes along with it.

Now the history of the word rheumatism, and the term catarrh begins at the very small point. The original thing was infection of the mucous membrane which was named rheumatism. The word is derived from the Greek, rhomnia, which means "to flow," and it was afterwards dropped from the mucous membrane and called catarrh. from the Greek kata down, and rheo, flow. So you see the history of the word does not enlighten one or mean anything in the world. When we come down to the pathology of rheumatism, we do not find any one specific organism which is constant in all cases. We may have half a dozen cases of so-called "rheumatism" and probably have as many different organisms present.

A friend has proceeded to call me down by saying there was such a thing as articular rheumatism, but we find the same thing in acute articular rheumatism. It is simply a bacterialization, and we do not know how it gets there. When you come to diagnose rheumatism, as the Doctor here says, you might as well call it that as something else; for we have to make a diagnosis.

I would like to see us get away from these old chestnuts. If we have a case of articular rheumatism, call it arthritis, and that is the best we can do. In cases where there seems to be a clogging of the system by uric acid, it is possible a case of poor elimination.

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A REPORT OF FIVE CASES OF ECTOPIC PREGNANCY.

DR. E. E. MORRISON, Great Bend, Kansas.

Read at the joint meeting of the Rice, Ellsworth, McPherson, Reno and Barton County Medical Societies, Sterling, Kansas, May 25, 1911.

An extra-uterine pregnancy is one of the most serious conditions that we encounter. Without surgical intervention, 50% of all cases die within a few weeks from the time of the first signs of trouble. In the remaining 50%, there is continual ill health and frequently resulting death within a few years.

The series of cases that follows, while short, serves to direct attention to several matters pertaining to diagnosis and treatment.

Case 1.—Mrs. P., age 25; mother of four children, the youngest, eight months old; had not menstruated since birth of last baby; was seized with violent pain in the lower abdominal region while at work, had noticed a slight bloody discharge for a few days previous. Examination revealed a cervix that was soft and blue; uterus slightly larger than normal; no palpable mass; pulse 120, face pinched; extremities cold. Pain was relieved by hypodermic of $\frac{1}{4}$ grain of morphine, pulse dropped to 105 and general appearance improved. Patient remained in bed for a few days then went about her work feeling as well as usual. Two weeks later, she was again seized by excruciating pain in the lower abdominal region while at stool. The symptoms above described were repeated and were more severe. Upon examination a small mass was detected at the left side of the uterus, the case was diagnosed as ectopic pregnancy and removed to the hospital. Upon her arrival there as her condition had improved materially and as she had a temperature of 101, it was decided to wait for further improvement before operation. The temperature stationary for three days and then was practically normal for one day. Another hemorrhage being feared it was decided to operate. The operation was done at nine o'clock in the morning. It was found that impregnation had occurred in the left tube and that the tube had ruptured. Some clotted blood, not a great amount was found in the peritoneal cavity and cleaned out. The impregnated tube was removed and the incision closed. Patient left the table in good condition. At three o'clock in the afternoon she had a pulse rate of 140 and a temperature of 104. She had considerable abdominal distension and tenderness. The extremities were cold and clammy. This condition continued throughout the night and death followed the next morning, twenty-four hours after operation.

Case 2.—Mrs. F., age 23; record does not show previous history except that for a few days before admission to the hospital she had suffered from symptoms which caused three physicians to diagnose an ectopic pregnancy. She had a high, thready pulse and not very much strength. She was operated on at once and a tubal pregnancy was discovered and removed. There was considerable fresh and clotted blood in the peritoneal cavity, most of this was removed. The next morning, the pulse rate was 120 and the temperature was 102. Both subsided promptly and

the patient made an uneventful recovery being discharged from the hospital at the end of 19 days.

Case 3. Mrs. W. age 26; no history of previous pregnancies or of menstrual disturbances; had an attack of violent pain in the lower abdominal region of such a nature as to cause her attending physician to suspect a threatened abortion. Later the results of his examination and his general observations caused him to believe that he was dealing with an extra-uterine pregnancy. The case passed out of his hands and into the hands of a man whose diagnosis was "bellyache" and whose prediction that the patient would be alright as soon as her bowels were well emptied, seemed fulfilled to the letter. This woman got out of bed in a week and did most of her work. Continual pain in the pelvic region caused her to seek further relief. Her temperature and pulse rate were normal, cervix soft, a history of irregular bloody discharge for the last three weeks was given. A small mass was easily outlined at the right side of the uterus. She was admitted to the hospital on Dec. 29, where she was operated on the next day. An impregnated right tube was found and removed. There was not very much blood in the peritoneal cavity. Recovery was prompt and the patient was discharged, January 12, fifteen days after admission.

Case 4. Mrs. A., age 33; history previous to admission to the hospital, not very clear, her case had been diagnosed and treated by her two attending physicians as obstruction of the bowels. She came to the hospital ten days after the first symptoms. At that time she had no uterine discharge, there was a distinct mass felt in the cul de sac and there was a distinct mass readily outlined in the left inguinal region. Her general condition was bad. Upon opening the abdomen a large amount of clotted blood was found filling almost the entire pelvis; the intestines were united in a mass of adhesions around the accumulation of blood. A sac as large as a hen's egg was found where it had been partially expelled from the left tube. The sac was still intact and contained early placental tissues and a small fœtus about an inch and a quarter in length. This woman made a good recovery and was discharged at the end of the fourth week.

Case 5. Mrs. W. age 32; mother of four children, the youngest being three years old. Menstrual periods regular since she quit nursing her baby two years ago. One evening as she was getting ready to go to church, she felt sick and as though she were about to menstruate. It being about the proper time for such event she paid little attention to her pains and went to church.

She came home feeling much worse and the next morning sent for a physician. He found her in a great amount of pain, and did not observe any physical condition of importance. She continued to have paroxysms of pain at irregular intervals for about six weeks. During this time she was in bed most of the time and called her medical attendant only three times. She had almost unbearable pain in the rectum at times. At other times she had pain as severe in the region of the symphysis pubis. All of this time she had what she described as a scanty menstrual flow. She complained of extreme pain during defecation. At about the end of six weeks, I examined her and found a cervix as hard as though it were carcinomatous. It was shrunken and not discolored. The top of the uterus was lost in doughy mass filling the pelvis. This mass was easily outlined above the pubic bone in the left inguinal region, in the vagina on each side of the uterus and in the cul de sac. Rectal examination revealed the same mass and nothing else of an abnormal nature. Her temperature was normal. Her pulse rate was between 90 and 100. Seven weeks after the initial attack she was admitted to the hospital. The abdomen was opened and about two quarts of clotted blood removed. This was walled in very closely by firm adhesions that were broken down sufficiently to gain room to work. A mass of decidual tissue enclosed in a sac which had been expelled from a ruptured tube was removed. Patient had considerable post-operative distress for a day or two and then made a comfortable and uneventful recovery. She was discharged from the hospital at the end of the third week well enough to make her railroad journey of 100 miles and subsequent automobile ride of 18 miles alone and unaided.

None of these cases had any symptoms that claimed attention until the woman was seriously ill. So far as I am informed, only one had the classical text-book symptoms. In none of them was the hemorrhage of sufficient gravity to cause death within a few hours. My experience with these cases would incline me not to operate immediately after the occurrence of the hemorrhage unless I could do the work very soon. A person suffering from shock never stands the additional shock of an operation well. If one clings to the usual ideas of our authors in the matter of diagnosis, he is apt to stray off in the wrong direction. It is only a short time since very much has been known about extra-uterine gestation. The first operation for the relief of the condition, of which we have any accurate knowledge was performed in 1883 by Tait. It is not a very frequent condition. It is believed to

occur in from one in 500 to one in 1000 pregnancies. The condition has not had the study that appendicitis or that the relief of inguinal hernia has had. Authorities cling to the authority preceding them. For these reasons much that has been written about ectopic gestation is misleading to the man who sees his first case. In reaching a diagnosis, it is of much value to exclude other possible pelvic disorders. It is a thing to be examined carefully from all possible viewpoints.

Why my first patient died, I have never known. I suspect that she had before the operation some nidus of infection which I stirred up, though at the time I saw absolutely nothing to warrant such conclusion.

THE SUPERVENTION OF CARCINOMA ON THE SITE OF CHRONIC ULCER OF THE LEG.

D. W. BASHAM, M. D., Wichita, Kansas.

Read by title before the Kansas Medical Society, May 3, 1911.

It is not to be maintained that ulcer is a very frequent cause of malignant neoplasm. Nevertheless, there are too many undoubted cases where cancer has developed upon the site of an old ulcer, a burn, eczema, or an X-Ray burn to permit us to pass the matter by as mere coincidences. It is altogether probable that an X-Ray burn, an old eczema, or a common burn might be the cause of cancer as readily as an old ulcer. The influences over tissue metamorphosis are the same in all these pathologic conditions, whether the pathogenetic metamorphosis is actuated by chronic irritation and inflammation or by irritant chemical medicaments so often employed in the treatment of these things it is impossible to say. It seems to have been an idea of Virchow that the malignant cell and consequently the malignant neoplasm was the result of an accident to metabolism. The insult to the normal process of metabolism must be of such a nature as to pervert the cytogenetic forces from the fulfilment of their work in producing the perfect cell. The self-evident fact in the genesis of malignant tumor is that the malignant cell must have its origin somewhere in the course of ordinary metabolic changes. The question then naturally arises as to whether the malignant cell is due to pathologic cytogenesis probably the result of a pathologic physiology of some important part of the chylipoietic system as probably is the case in pernicious anæmia, or is the cell which was normal in the beginning changed to a malignant type

at some part in its development through the effect of peripheral irritation.

Carcinoma seems to be the form of malignancy originating most frequently from chronic ulcer. It would, therefore, appear, that long and constant irritation is necessary to produce a true cancer.

There can be no doubt that sarcoma very often has its origin in an injury. The injury is usually but a slight one and the sarcomatous neoplasm usually makes its appearance within a few months.

Why the chronic ulcer should result in carcinoma and the acute trauma in sarcoma is not yet understood. As stated in the beginning, we do not propose to claim that chronic ulcer is a very frequent cause of cancer, but we must keep in mind that there are many cases of carcinoma which undoubtedly have their origin in old ulcers, the cicatrices of burns, lupus and chronic eczema. There must, therefore, be something in these chronic conditions which exerts a power either to originate a malignant cyto-biosis or to convert the normal cell into a malignant type.

Case. Mr. W. E. G., aged 75, height 6 ft., weight 200 pounds, caucasian race, widower, retired banker, residence Yates Center, Kansas. Temperature 100 F., pulse 100 per minute, tongue furred, bowels constipated, and skin dry.

His father died at the age of 75 years of some disease of the stomach. His mother died of pneumonia, aged 65 years. His paternal grandfather was drowned at sea at the age of 40 years. His paternal grandmother lived to a great age. He had eight brothers, all dead but one. Four brothers died in infancy, one brother died at the age of 70 of cancer of the bowel. Another brother died of typhoid fever, and another of pneumonia, ages not given. The brother still living is fifty years of age.

He had four sisters, all dead but one. One sister died of typhoid fever one in status parturientes, and the other in adolescence. One sister is still living at the age of 53 years.

The patient has had ill health all his life. During early life he was afflicted with a chronic cough. At the age of twelve he was bitten by a rattlesnake on the inner aspect of the right ankle. At about the age of eighteen years he fell from a house lacerating the soft tissues of the right leg extensively, At the age of twenty-seven, and while serving in the army he sustained a fall from his horse, injuring the right leg at the present site of the epithelioma. This injury was three or four months in healing. The sore did not remain healed, but was alternately opened and

closed until about eight years ago, since which time it has always remained open. The veins in the diseased leg have been enlarged and tortuous, and are still so. Until about three years ago there was nothing unusual in the appearance of the sore. At this time a small cauliflower excrescence appeared in the ulcer looking different from anything that had occurred before. From this excrescence a watery fluid was excreted. There was no odor emitted from the sore at this time. A medical man removed this cauliflower excrescence by means of caustic, exactly what, the patient did not know.

About three or four months before he came to the hospital a fungus mass appeared in the ulcer which discharged a watery fluid that gave off a foul odor. The sore had had a disagreeable odor for sometime before the fungus mass was observed.

The growth having all the macroscopic appearance of cancer, a section was removed under Schleich's infiltration anæsthesia for microscopic examination. The microscopic work was kindly done by Drs. Anderson and Seydell, house surgeons for the St. Francis Hospital at that time. The sections showed the neoplasm to be an epithelioma.

Amputation was decided upon and on January 29, 1910, the limb was removed just above the knee by the Lister modification of the Carden operation. The operation was placed above the knee joint for the reason that I felt that immunity might more certainly be obtained by going higher. The convalescence was without incident and the patient still remains well. The ulcer was situated on the external and anterior aspect of the right leg. It began four inches above the external malleolus. It extended five and a half inches up the leg. It was seven inches in the transverse direction. The leg was seventeen inches in circumference. The growth was a foul looking malodorous cauliflower excrescence, ulcerated here and there. The edges raised and sharply circumscribed. Bleeds easily and freely and of livid color; above the growth the skin was eczematous. Below the mass the ankle and foot were edematous. There was small ulcer two and a half inches long by one and a half inches wide in front of the ankle. The edges of this small ulcer were hard and its center was composed of an islet of apparently healthy skin. Another small ulcer semi-lunar in shape with hard edges was situated just above the external malleolus. There was another small ulcer above the growth on the anterior surface of the leg. The tibia and fibula were both involved in the malignant process. Depth from highest part of growth to bone, one inch. Muscles and their sheaths infiltrated.

Also the anterior tibial nerve. Microscopic sections were taken from the small ulcer, from ulcer situated anteriorly above the mass, and from the main tumor including adjacent skin.

The photographs will serve to give some idea of the appearance of the case. I may add that a thorough study of the sections at leisure after the operation confirmed the diagnosis of epithelioma.

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CARDIAC ARRYTHMIA.

THOR JAGER, M.D. Wichita, Kansas.

Read before the Kansas Medical Society, May 5, 1911.

In the last few years the clinical as well as laboratory investigations have advanced our knowledge in some very important and vital respects in regards to the physiology and pathology of the heart. Some of our time-honored theories have been changed and in some other respects we have gone back to theories held many years ago. There are still some fundamental physiological questions to be settled before we can expect to gain a satisfactory explanation for certain phenomena of the heart. With the acceptance of the myogenic theory of cardiac contractions, e. i., the theory which holds that the stimulus causing the contraction originates in the heart muscle cell itself, quite independently of extra-cardiac nerves, we made a tremendous advance and still it seems as if that theory will have to be modified in the light of later investigations. Through the brilliant embryological research work by His jr., it was shown that the ganglion cells of the heart, which, according to Ludwig and others were the motor center of the same, have an extra-cardiac origin and grow into the heart at the time when it already has shown typical contractions. It would seem that this argument alone would be sufficient to establish the truth of the myogenic theory of Engelmann. Further it is shown that excised parts of the heart muscle, which careful microscopical examination had proved to be absolutely devoid of ganglion cells, were able to carry out typical muscular contractions. The myogenic theory has of late been challenged by the upholders of the neurogenic theory, and it would seem as if the heart ganglia would regain some of their former dignity. With the discovery of the so-called auriculo-ventricular bundle of His and its complicated branching system connecting the auricles with the ventricles, did not only the myogenic theory receive a strong support, but we also obtained an

explanation of some hitherto not understood clinical phenomena.

It is generally assumed that the motor impulse of the heart, begins at the opening of the vena cava superior, and that the impulse from there is transmitted to the auricles by the way of a special muscle bundle, anatomically resembling the His bundle, the so-called sino-auricular bundle or nodes of Keith and Flack.

From the auricles the motor impulse is carried to the ventricles over the well known His-Tawasra mucular system.

In regards to the sino-auricular bundle of Keith and Flack, there is still some doubt as to its exact physiological function.

The normal pulse is characterized by equality not only of the size of the individual pulse waves, but also the time interval separating the waves. Any disturbance of this normal relationship is classed as arrythmia. Arrythmia is observed as a symptom of various pathological conditions of the heart and also as a purely nervous disturbance of the cardio-vascular system. Various types are distinguished.

Simple arrythmia, or sinus irregularity, in which type the individual pulse waves are of normal and equal size, but the time between them slightly altered. It may be decreased or increased in length. We meet with this form of arrythmia most frequently in children after the acute infectious diseases and also in meningitis. It is quite harmless and has no clinical significance. A post diphtheritic arrythmia however, is not of this type and should at once make one suspect a myocarditis, so commonly a sequel of this disease. The so-called respiratory arrythmia also belongs to this class. Even in a normal individual with a healthy heart one may find that the rythmus is changed on deep inspiration, and usually in such a manner that the pulse beats become more frequent and smaller during inspiration, and slower and stronger during expiration. This simple arrythmia usually disappears after the use of atropin. Pulsus paradoxus is a special variety of respiratory arrythmia and is characterized by a more marked effect on the pulse on deep inspiration. It may be so marked as to cause a complete disappearance of the pulse during inspiration. This type was first described by Kussmaul, and is most commonly seen in intra-thoracic conditions producing a traction on the large vessels as in mediastinitis and pericarditis with adhesions.

Extrasystole is also a common form of arrythmia. In order to understand the production of this form of arrythmia it is necessary to recall certain physiological facts. A slight stimulus, sufficiently strong to produce a cardiac contraction always results

in a maximum contraction of the heart. Following this contraction the heart enters into a so-called refractory period when no stimulation, be it ever so strong is able to produce a contraction. This refractory period is most pronounced immediately before and after the systole..

If one experimentally stimulates the ventricle of an animals heart during the diastole and after the refractory pause has ceased the heart responds by the production of a premature contraction, a so-called extrasystole. Following this extrasystole the heart agains enters into a refractory state and when it receives the next physiological stimulation from the auricle, it thus finds the ventricle not responsive and in consequence the next normal contraction does not take place. This pause following the extrasystole is called the compensatory pause. The next normal stimulation from the auricle, however, produces a contraction. The interval between the systole preceding the extrasystole, and the one following the same occupies therefore, twice the normal time between two heart contractions. This long pause gives rise to an irregular pulse and as the extrasystolic wave frequently fails to reach the radial artery it may simulate a brady-cardia. On auscultation of the heart the extrasystole is heard as a premature contraction following the normal systole. This extrasystole is not only observed objectively, but the patient himself often is conscious of its occurrence as it gives rise to a jerky sensation in the region of the heart. According to Hering the extrasystole is caused by an abnormal irritability of the cardiac muscle caused by inflammatory changes of the myocardium or endocardium or in any condition producing distention of the chambers of the heart. This does not permit one to conclude that there always are organic changes in the heart causing the extrasystole. Frequently it is only the manifestation of the nervous cardiac disturbances.

To differentiate between an extrasystole of organic or nervous origin, it is important to ascertain whether it is associated with subjective disturbances or not. The "nervous" extrasystole is usually preceived by the patient as a strong jerk in the region of the heart, while the one caused by organic disease seldom causes objective symptoms. The greater the subjective disturbance associated with this phenomena, the less marked its clinical significance. In clinical as well as experimental work on the heart we not only meet with extrasystole of ventricular origin, but also of auricular origin. From stimulations arising from the auriculo-ventricular bundle we may get synchronous extra-

systoles of auricles and ventricular. The sinus extrasystole supposed to originate in the bundle of Keith and Flack has only a theoretical interest. The extrasystoles may occur in a regular or irregular order. If one extrasystole occurs regularly after each systole, we speak of a *pulsus bigeminus*, i. e., two beats following closely to each other and separated from the next beat by long pause; if two extrasystoles follow one normal beat, we have a *pulsus trigeminus*. The extrasystole never causes a normal pulse wave in the radial artery, often it is never felt there and if present at all, is much smaller than the normal wave.

We have in heart block a form of arrhythmia that has been most thoroughly studied experimentally as well as anatomically, and clinically. In speaking of heart block we usually refer to the block at the auriculo-ventricular junction, although other forms exist. This is due to a failure of the bundle of His to properly conduct the impulses from the auricle to the ventricle. It may be due to organic or functional disturbances of this bundle, and it may be partial or complete. The auricles and ventricles in the complete block beat quite independently of each other, the auricle usually continuing at the normal rate and the ventricle assuming a rate of its own, usually a much slower one, thus there may be two three or more, auricular contractions to each ventricular beat. If the interruption is due to an organic disease, it is usually caused by inflammatory changes, gummata or in rare instances, tumors. The functional heart block, without evident organic lesion of the His bundle may be produced by certain poisons, the one due to digitalis, being the most important, which drug therefore is absolutely contra-indicated whenever we have reason to suspect a heart block. This digitalis drug reduces the conductivity of the bundle of His. Irritation of the vagus also causes a partial heart block, which, of course disappears after its ending has been paralyzed by atropin. In a number of cases presenting heart block, but by no mean in all, we may at times observe the so-called Adams-Stoke Syndrome, characterized by a marked and lasting bradycardia, attacks of unconsciousness and at times epileptiform convulsions. This is practically always due to an organic lesion of the bundle of His, but there are a few cases on record which make it seem possible that it may also occur in a block due to an over-stimulation of the vagus. The sino-auricular block due to an interruption of impulses from the sinus nodes of Keith and Flack, situated at the mouth of the vena cava superior we must consider as very doubtful. The investigators, who have tried to determine the function of this bundle or node

have reached such different conclusions that it would be rash as yet to speculate too far on its clinical significance. Hering thinks he has been able to cause a cessation of the auricular contractions by severing the connection between this bundle and the auricle, and more recently he has announced that the destruction of the same in some instances, causes the auricles and ventricles to beat synchronously. In my own investigation, published in August 1910, I failed to produce any such disturbance of the rhythm after the nodes had been partially or completely destroyed by means of the actual cautery. Other laboratory investigators have come to still different conclusions, so we must consider the question of the physiological function of this bundle or node as still unsolved. If a sino-auricular block really does exist, it is probably due to a more extensively lesion at the vena cava superior-auricular junction rather than to a change in the node itself. The so-called interventricular block, due to a disassociation of the right and left ventricle is also doubtful, although there are cases reported by good clinical observers.

Pulsus alternans, which strictly is not a form of true arrhythmia is characterized by alternating stronger and weaker contractions of the heart. The pulse then shows one large wave followed by a small one, the interval between the same remaining normal. In extrasystolic arrhythmia we may also observe such alterations, but there the interval is not normal. the smaller wave occurring prematurely. This form of arrhythmia is thought to be due to a lessened contractility of the heart muscle and is therefore prognostically an unfavorable sign.

The pulsus irregularis perpetus, the absolute irregular heart, is a form of irregularity, which of late has been widely discussed and has been the subject of much clinical as well as experimental investigations, especially by MacKenzie and Hering. The latter originally assumed it was due to a synchronous contraction of the auricles and the ventricles, or perhaps to a failure of the auricles to contract at all, i. e., a paralysis of the auricles. Lately the theory has been advanced that it is due to fibrillations of the auricular musculature, i. e., irregular contractions of the various muscles bundles of the auricular myocardium. Here the individual pulse beat follow each other in an absolutely disorderly manner, and in its true form the arrhythmia never disappears. It is doubtful if the cases which presented similar form of arrhythmia, but which did not persist, should be put in this class. Hering, who has called our attention to the pulsus irregularis perpetus, believe it to signify a tri-cuspid insufficiency, but now we know

that it is met with in many other conditions of the heart, most frequently in chronic myocardial insufficiency and in mitral disease. In general it is a relatively unfavorable sign, but may improve under the digitalis therapy.

The paroxysmal tachycardia is by some authorities classified among the arrhythmias of the heart, but we do not feel that it properly belongs there.

For the scientific study and diagnosis of the various forms of arrhythmia it is necessary to make synchronous tracings of the apex beat, the radial artery and the jugular vein. We have now a number of different cardiac sphygmographs permitting the graphic registration of the same. The writer uses Jaquet cardio sphygmographs and finds it a very convenient and practical instrument. In the last few years the electro cardiogram has taught us a good deal about the various forms of arrhythmia, but it is not within the scope of this paper to discuss this complicated method, which demands very elaborate apparatus, and after all, yielding but few results of practical importance.

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Abdominal Symptoms in Thoracic Disease.—The simulation of abdominal disease by deep tenderness, muscular rigidity, collapse and the Hippocratic abdominal symptoms of rupture and peritonitis in purely thoracic affections, one of pneumonia operated on for perforation and peritonitis, but proving to be pneumonia, and the other of pericarditis and upper lobe pneumonia simulating peritonitis, are reported by A. R. Edwards, Chicago (Journal A. M. A. June 17). He reviews briefly the symptoms as described in the literature, and insists on the following points as proper to be considered: "1. Pneumonia, pleurisy and pericarditis, at their very onset, may present absolutely no symptoms other than the abdominal findings. 2. These phenomena of invasion may completely resemble appendicitis, peritonitis of other etiology or even the collapse of perforation. 3. Diagnostic errors and unnecessary operations may be unavoidable. Immediate operation is imperative, and the small percentage of error is negligible in comparison with the benefits of early operation in genuine indications (particularly as 80 per cent, of patients operated on under a mistaken diagnosis recover). 4. The tenderness does not always remit with deep, flat pressure, and relaxation of the abdominal parietes, between respirations, is not invariable. 5. The general symptoms do not invariably overshadow the local, the latter at times being the more salient."

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

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The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1909, it incorporated the Wyandotte County Medical Journal, owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

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EDITORIAL

When one considers the attendance at the other state medical society meetings has been way below the average then the attendance at our last meeting does not seem so small; for instance: California and Texas had in the neighborhood of 200 registered at their last annual meeting. This simply goes to show that it is an "off year" for medical meetings but no argument why our society should not be better attended. Is it because we are getting too *blase* or force of circumstances. Certainly with a membership of eleven hundred, we should have an attendance of at least three hundred. Here's hoping that the "crops" will be so good, money plentiful and indications for a large attendance at Hutchinson in May 1912.

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To say that we are anything more than figure-heads when it comes to getting anything in the way of legislation from the law makers, only about half tells it. We are to express it in the street slang, "muts". When the medical fraternity asks the state legislature to pass a bill helping to stamp out disease, decrease the mortality or anything under the sun that looks like it comes from the physicians singly or collectively, then the learned (pardon the word) legislators immediately feel a sense of duty? they owe their constituents to fall upon it and stab it to the heart.

On the other hand if the optometrists, christian scientists, or any other sect or body that even looks like it opposes medical practice comes up with a bill it usually goes through without much trouble. Just how long are we going to "stand for it"? How long are we going to set idly by while some legislator gets up on the floor of house or senate and makes a speech attacking a bill that has been endorsed by the medical profession of the state and sets himself up as a judge to decide a question that at most he has only the slightest knowledge. How long are we going to let christian scientists, irregulars and medical what-nots control the destinies of medical progress in the state? The answer is this: Just as long as we fail to see our legislators or rather the candidates before election, and when we find any candidate that has ideas detrimental to the welfare of medicine or medical progress fail to "go after him." We must have the political power if we wish to help humanity. Does it not sound strange that we must go into politics to keep humanity from getting sick. But such is an absolute fact. If we want to keep down harmful legislation and get through good legislation, we must have power and that power can be gained only by getting into politics. We must sound every legislator on medical bills that are to come up at the next session and those legislators that don't speak the Kansas (medical) language or will not "get right" we will get out our axe publicly, privately and with malice aforethought smite him politically dead. Lets wake up the "natives" and with a war whoop that will startle if not cast into hysterics, the legislators, who, either will not listen to reason or else have not the ability to grasp it into action, that will be just. We want nothing unreasonable, merely to protect those who are too weak physically or mentally to protect themselves.

SOCIETY NOTES.

The summer meeting of the Golden Belt Medical Society was held at Salina, Kansas, July 6, 1911. The following program was given.

Paper, "Some Causes and Treatment of Headaches," Dr. J. W. Simmons, Salina; Paper, "Some Deep-seated Pathological Conditions of the Neck," Dr. Fritz J. Moenninghoff, Kansas City, Mo; Paper, "Diagnosis," Dr. W. A. Smiley, Junction City; Clinic, Conducted by Dr. P. T. Bohan, Kansas City, Mo.

L. O. NORDSTROM, Secretary

Sumner County Medical Society met June 29, 1911, at St.

Lukes Hospital, Wellington. The following program was given:

Duties of Health Officers, Dr. Sippy, Belle Plaine; Paper by Dr. Waggoner, Ponca City, Okla; Otitis Media Acute, Dr. Sarchett, Wellington; The Human Tongue, Dr. McKinnon, Argonia; Paper, Dr. Day, Arkansas City.

The superintendent of the hospital, Mrs. A. M. Sutphen, tendered the members a luncheon in the evening.

T. H. JAMIESON. Secretary.

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Mississippi Valley Medical Meeting.—The preliminary announcement of the thirty-seventh annual meeting of the Mississippi Valley Medical Association has been issued. The association will meet at Nashville, Tenn., October 17-19, under the presidency of Dr. Robert H. Babcock, Chicago, the subject of whose address will be "Medical Tendencies." The address in surgery is to be delivered by Dr. Joseph D. Bryant, New York City, on "The Indebtedness of Posterity to the Pioneer Surgeons of the Mississippi Valley," and the address on medicine by Dr. James C. Wilson, Philadelphia, on "Doctors and the Public." There is to be a symposium, including both sections of the society, on the "ptoses", with papers by Drs. E. W. Suckling, Birmingham, Eng., on visceroptosis, and a report of four hundred operations for nephroptosis by Mr. D. Billington, Birmingham, Eng. There will also be symposiums on cholecystitis and genitourinary diseases.

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Great preparations are being made for the 6th Annual meeting of the Medical Association of the Southwest, which will meet in Oklahoma City, Okla., Oct. 10-11-12, 1911.

The Association will have present as its invited guests, Dr. A. R. Edwards of Chicago, Ill., who will deliver the oration on internal medicine, and an officer from the Public Health and Marine Hospital will be specially detailed to attend this meeting to present a paper on some topic of public interest.

The secretary has made application for reduced rates on all the railroads and the profession of Oklahoma City, are planning great things for the members attending, and these things with an unusually strong program should attract a larger attendance than any former meeting.

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NEWS NOTES

Dr. and Mrs. W. F. Fairbanks of Kansas City, Kansas, sailed on July 10th for Europe on a tour. They will return in two months.

Sixty-five Thousand Dollars for the Study of Cancer.—On May 11th the Governor of New York signed a bill appropriating \$65,000 for the establishment in Buffalo of a hospital to conduct investigations into the cause, nature, treatment, prevention, and cure of cancer and allied diseases. The management of the institution is to be vested in a board of trustees of seven members, including the State Commissioner of Health.

NOTES OF THE LOS ANGELES MEETING OF THE A. M. A.

The attendance was considerably less than last year, there being in the neighborhood of three thousand registered. This can be accounted for by fact of the great distance necessary to be travelled by a large number from the thickly populated districts in the east.

Kansas was represented in the House of Delegates by Dr. Marion Trueheart of Sterling and Dr. P. S. Mitchell of Iola.

The society will meet next year in June at Atlantic City.

The entertainments provided by the committee were lavish to a high degree and eclipsed by long odds, anything previously attempted. There was something to do every minute as it were for instance, a trip to Catalina Islands, reception to the president, a trip to Pasadena with a barbecue dinner, horse and chariot races, smoker, lunches for the different section and numerous teas and receptions for the ladies. The event will long live in the memories of those who attended.

The election of Dr. Abraham Jacobi of New York as president, comes as a fitting honor to a man who has spent his life work in the interest of medical science. Few men indeed can point to a career so filled with great things done for humanity as can Dr. Jacobi. His election should meet with universal approval.

The Santa Fe ran a special train consisting of seven sections, which were occupied by physicians from the East and the Middle West. Stops were made at Albuquerque, N. M., Redlands and Riverside, Calif., where the travellers were entertained by the local physicians.

Two familiar faces we of Kansas met in California were Drs. J. E. Minney and O. J. Furst, both ex-presidents of our State

Society. Dr. Minney has established his residence in Los Angeles and Dr. Furst is living in Glendale.

It may be of interest to publish the items required for the bill of fare at the Pasadena day. Following is the list:

Barbecued rolled meat, lbs.....	2500
Frijoles (beans), lbs.....	500
Chilii Con Carne, lbs	550
Bulls' heads.....	16
Whole lambs	16
Large potatoes.....	2200
Black coffee, gals	200
People employed	119
Trays for service.....	3000
Paper dishes.....	10000
Knives and forks, pairs.....	6000
Cups and saucers	6000
Salad, 8 big tubs, gals.....	240

Following is the list of members from Kansas who attended the meeting: Robert Algie, Linn; Chas. E. Browers, Wichita; J. B. Brickell, Americus; Thomas R. Cave, Manhattan; W. H. Clarkson, Manhattan; S. J. Crumbine, Topeka; Martha E. Cunningham, Garnett; J. G. Dorsey, Wichita; Abner B. Dunn, Wichita; O. J. Furst, Peabody; M. N. Gardner, Greenleaf; W. H. Graves, Pittsburg; Jno. L. Grove, Newton; J. F. Gsell, Wichita; J. H. Guinn, Arkansas City; J. Loughridge, Lincoln; Geo. H. Litsinger, Riley; R. S. Magee, Topeka; G. P. Marner, Marion; G. W. Maser, Parsons; James W. May, Kansas City; P. S. Mitchell, Iola; J. C. Oldham, Wichita; Andrew S. Pavlish, Kansas City; Alexander R. Scott, Jetmore; Jacob Foster Shelley, Elmdale; A. J. Smith, Leavenworth; N. C. Speer, Osawatomie; G. O. Spiers, Ellinwood; S. W. Spitler, Wellington; H. L. Steele, Pittsburg; W. P. Stoleneberg, Kinsely; W. Otis Thompson, Dodge City; M. Trueheart, Sterling; H. G. Welsh, Hutchinson; J. C. Wilhoit, Manhattan; Wm. Williams, Pittsburg; F. M. Tracy, Kansas City.

Dr. C. S. Huffman was appointed a member of the Committee on Hygiene and Public Health.

Communications.

Editor Journal:

I see our councillor in the third district is not well informed

regarding the Wilson County Medical Society, We have a dandy good live county society and meet regularly four times each year. There are 22 reputable physicians in our county and 18 of them are members in good standing of the county and state societies. Our meetings are well attended.

Our summer session was held at Altoona Tuesday evening, June 13th, in the office of Dr. Moore, 12 members being present.

Quite a little friction has existed for some time between the Physicians and the County Commissioners regarding medical services for paupers. We have employed an attorney, and as the law gives all the advantage to the Commissioners, we are trying to devise ways and means for securing better treatment along the above lines.

Dr. L. L. Jones read a paper on "Arterio-Sclerosis. It was a masterly paper and we all needed brushing up on this particular subject. It was so well received that by a unanimous vote it was decided to send it to our state Journal for publication.

The five local physicians at Altoona are all good members of the society, and were all present, Dr. L. L. Jones, Dr. M. T. Billingslea, Dr. M. L. Somers, Dr. W. H. Addington, and Dr. E. F. Moore. Other members of the society all made the trip in machines, they being Drs. Moorehead, Sharp, McGuire, Williams from Neodesha. Dr. Riley from Benedict, Drs. Flack and Duncan from Fredonia and Dr. M. A. Duncan from Chanute, being a visitor.

Our fall meeting will be at Buffalo in September.

Yours Sincerely,

E. C. DUNCAN, Secretary.

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UNAUTHORIZED USE OF A PHYSICIANS' NAME.

To the Editor:—A book entitled "Large Fees and How to Get Them," has recently appeared, published by one W. J. Jackman, which purports to contain an introductory chapter written by me. The book is being advertised as having been jointly written by one Dr. A. V. Harmon and myself. I desire to state that my name is being fraudulently used. I know neither the publisher nor Dr. Harmon, nor did I ever write a line for the book. The introductory chapter and several later chapters—for which latter, credit is not given—were, without my permission, taken bodily from my "Medicine as a Business Proposition." There is no Dr. A. V. Harmon, in either the Blue Book or American Medical Directory. He is in my opinion a blind, the authorship of the book resting with the publisher. All persons selling or

circulating same, or advertising or reviewing the book in connection with my name, do it at the risk of legal complications. I would respectfully ask the medical journals of the country to copy this letter verbatim, thus warning the profession against what, so far as the use of my name is concerned, is a fraud, pure and simple. The title of the book alone should condemn it, while as for much of its contents, the less said the better.

G. FRANK LYDSTON, M. D., Chicago.

MISCELLANEOUS .

The Medical Trust.—Dr. J. A. Witherspoon of Nashville in his presidential address at the recent meeting of the Tennessee State Medical Association makes the following statement regarding a subject which has been much agitated by certain Illinois members of the profession.

"Fellows of the Tennessee State Medical Association: There is not a man sitting here to-night, engaged in the practice of medicine, who does not know that this particular claim that is being urged all over the country about the medical trust and the American Medical Association being the father of it is ridiculous, is so absolutely preposterous that no sane man would use it as an argument except for evil purposes of his own. I will tell you why that name was given it, because for the first time that great body of organized doctors had the daring and the bravery to attack in the very citadel the strongholds, these nefarious practices which have been carried on all over this country as if they were not only dictators to the people, but they have had the impudence to walk into a doctor's office with a little bottle of medicine and tell him how to treat every kind of disease without the slightest knowledge or idea of pathology, etiology or symptomatology."—Illinois Medical Journal.

For Sale. Yale operating chair, in good condition, address, Dr. A. H. Connett, Great Bend, Kansas.

Case Reports.

Cancer of the Omentum. H. T. Karsner, Philadelphia, (Journal A. M. A., June 24), remarks on the rarity of primary sarcoma of the omentum and reports a case. The condition appears to affect the white race almost exclusively, only one exception, a Chinamen, having been reported, and affects females more commonly than males, and is most common between the

ages of 30 and 60. The onset is insidious and duration variable. Cachexia is not marked, anemia moderate, wasting gradual and not severe; there are vague gastro-intestinal disturbances sometimes simulating intestinal obstruction, occasional adherence of omental mass to liver simulating enlarged liver, moderate ascites usually clear but sometimes blood-tinged, slight edema of lower extremities, occasionally extension of superficial abdominal veins, vague abdominal discomfort rather than pain, and death from asthenia. Metastasis is uncommon and direct extension is not usually widespread. The case reported is of a woman aged 64. The symptoms were characteristic and the pathologic diagnosis from the necropsy were epithelioma of the great omentum.

Strangulated Hernia.—J.R. Judd, Honolulu, Hawaii, (Journal A. M. A., June 24), reports a case of strangulated hernia that had lasted four days before being seen. The abdomen was greatly distended and tympanitic and there was considerable pain. Operation revealed a gangrenous intestine involved in the hernia, 12 centimeters of which were excised together with a wedge off mesentery, and an end-to-end anastomosis made with sutures. There was gangrene of the right testicle, which was also removed. This was due to pressure from the sac and its contents. Judd specially notices the absence of vomiting in this case after so long a duration of the strangulation, vomiting being given as almost an essential feature in the text-books.

Obituary.

John Henry Brierley, M. D., Starling Medical College, Columbus, O., 1878; of Glasco, Kan; formerly a member of the American Medical Association; a member of the state legislature for several terms; ex-president of the Kansas Medical Society; local surgeon of the Union Pacific Railroad; died at a hospital in Kansas City, June 14, aged 62.

Harvey A. Warner, M. D. University of Wooster, Cleveland, O., 1873; of Topeka, Kan; a member of the Kansas Medical Society; lecturer on life insurance in the Kansas Medical College, Independence; died at his home, June 9, from a stroke of apoplexy, received February 16, aged 61.

Thomas Hartford Wileman, surgeon of volunteers during the Civil War; died at his home in Seneca, Kan: January 3, from senile debility, aged 81.

Charles Ott, M. D., Ensworth Medical College, St. Joseph, Mo., 1895; of Kansas City, Kan; died at the home of his son in Higginsville, Mo; June 9, from nephritis, aged 60.

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David W. Thompson, M. D., Eclectic Medical University, Kansas City, 1902; of Kansas City, Kan; a member of the Kansas Medical Society, died at Seattle, Wash., January 12, from endothelioma of the cerebrum, aged 53.

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Orlando M. Edwards, M. D., Medical College of Ohio, Cincinnati, 1859; a member of the Neosho County (Kan.) Medical Society; died at his home in Chanute, April 26, from heart disease, aged 74.

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Bolivar Antrobus, M. D., Medical College of Cincinnati, 1876; a veteran of the Civil War; coroner of Mitchell County, Kan. from 1890 to 1892; died at his home in Beloit, June 3, from pneumonia, aged 75.

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John William Reno (license, Kansas, 1901); died at his home in Tonganoxie, June 3, from heart disease, aged 65.

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Joseph T. Pindell, M. D., University of Maryland, Baltimore, 1865; a medical cadet in 1864 and then for two years surgeon in the army; at one time a member of the council and mayor of Wellsville, Kan; died at his home in that city, May 22, from nephritis, aged 81.

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Cyrus C. Paxson (license, Kansas, 1901); for twenty years a practitioner of Bolten, Kan; and for the last six years a resident of Independence; died in the Montgomery County Hospital, May 18, from cerebral hemorrhage, following a fracture of the hip, aged 74.

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CLINICAL NOTES

Courvoiser's law is rarely broken—enlargement of the gall bladder with pronounced jaundice means neoplasm.—American Journal Surgery.

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In the presence of a smooth, hard, fixed and often tender abdominal tumor giving no characteristic symptoms, it is worth while to think of an ectopic or fused kidney—especially if the mass

be in the median line or near the pelvis.—American Journal Surgery.

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Rigidity of the muscles in the flank on deep palpation is as valuable a diagnostic sign as is rigidity of the anterior abdominal muscles. In the presence of a urinary disturbance (e. g., anuria, pyuria hematuria unilateral tenderness and rigidity in the loin are presumptive evidence of affection of the kidney on that side.—American Journal Surgery.

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The Test Meal and Gastric Cancer.—Without in any way minimizing the value of laboratory examinations of the stomach contents, etc., I am more and more convinced that gastric cancer itself does not give rise to diagnostic symptoms during the curable stage. In the later stages the clinical picture and laboratory findings are characteristic; by this time, unfortunately, the prognosis is equally as plain as the diagnosis, but if the disease is situated in the pyloric end of the stomach, it early introduces mechanical conditions which furnish the most valuable information.—Wm. J. Mayo, in the J. A. M. A.

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Trephining for Apoplexy.—Trephining in case of cerebral hemorrhage is recommended by J. G. Milligan, Pittsburg, Pa. (Journal A. M. A., June 17). He asks whether we shall sit idly by and leave a brain scar or unabsorbed cyst to make a patient aphasic or hemiplegic for life. In a case of intestinal perforation or rupture of tubal pregnancy, prompt surgery would be the rule, and surgery of the brain, he thinks, is equally imperative, though not necessarily so prompt. In hematoma of the brain the first seventy-two hours is likely to settle the fate of the apoplectic, providing he survives the shock, and after that the patient is generally in better condition for operation than in the usual case of cerebral traumatism. Each day thereafter, for a limited time, say ten days from the attack, it is still more favorable, and the surgeon can choose his time for operating. As technic improves and the time to operate becomes more definitely known, the percentage of fatal cases will become less. He reports the case of a patient operated on eleven days after the attack, with good results.

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A synovitis, especially of the wrist, elbow or knee, may be syphilitic in origin, and in obscure cases, an antisiphilitic regimen may clear up the case. The synovitis that does not respond to

the usual rheumatic remedies warrants a trial with mercury. *American Journal Dermatology.*

Hexamethylenamin in Colds.—Austin Miller, Porterville,, Calif. (*Journal A. M. A.*, June 10). says that, in view of the reported excretion of hexamethylenamin in the secretions of the parts affected in common cold, he has been trying it in this condition during the past year. In most cases it acts promptly and efficiently. The irritating watery secretion of coryza stops; the fever, aching and malaise of influenza cease; the threatening disease is averted. It should be administered as soon as possible after the nose begins to feel stuffy and discomfort begins. If delayed till later in an old cold and after mixed infection has occurred its effects are less satisfactory. As regards dosage, he thinks a larger amount should be used than is required for urinary antiseptics, and at the onset he prescribes twelve grams in twelve powders of fifteen grains, one powder to be taken in a glass of water four times a day. Copious water drinking is advised to lessen bladder irritation, which is the only ill effect, but occurs only occasionally and disappears as soon as the medicine is discontinued.

Silver Wire for Drainage.—R. M. Harbin, Rome, Ga., (*Journal A. M. A.*, July 15) has been using fine silver wire in the form of wicks for abdominal drainage after acute appendicitis and mentions its advantages. Such wicks, firmly twisted, possess marked capillarity, the more so the finer the wire. This can be illustrated by inserting it in siphon form into a test tube of water. While not equal in capillarity to gauze, it seems to retain it longer. The wicks can be made sufficiently pliable to avoid trauma while still firm enough to retain their original shape and so can be adjusted to drain a tortuous tract and can be well applied for draining the post cecum. Of course, it is necessary for it to be firmly twisted so no omentum, etc., can enter the meshes. It will be seen that its physical properties make it adaptable for a number of conditions. Lastly, he mentions the slight antiseptic properties of silver and says that his observations seem to warrant the assumption that it might tend to antisepticize a mildly infected wound. He offers this suggestion for further studies.

Perforating ulcers and localized gangrenous processes in one or both feet, without other obvious cause (e. g. tabes, diabetes, obliteration of bloodvessels, frost-bite) indicate a careful examination of the spine for an evident or concealed spina bifida.

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A STUDY IN THE EXAMINATION OF THE INSANE.

DR. T. C. BIDDLE, Topeka, Kansas.

Read before the Kansas Medical Society, May 5, 1911.

MR. CHAIRMAN: In writing this paper, the thought was to meet a local condition that we have in Kansas, and to give in brief outline some of the salient points, by means of which the matter of alienation, its extent, and form might be determined in an intelligent way.

A hopeful sign of medical advancement is the awakening interest of the profession in the department of mental diseases. The profession as a whole has too long considered the subject, if at all, with a degree of indifference that has not been consistent with its interest in other fields of medical progress. Mentality is the chief function of an important organ of the body, the brain. This being true, it certainly follows that the thoroughly equipped physician should understand the physiology and pathology of this important organ.

It is true that the mind and its diseases are not fully known; the mind is complex and mysterious. However, it is also true that the functions of the brain are more perfectly understood than are the functions of some of the other organs of the body, viz, the ductless glands; then why is it that physicians so frequently regard mental diseases as being outside their professional requirements? It is surely not because the infrequency of mental disease affords no opportunity for the study of insanity; every practitioner is frequently called upon to treat cases, to advise the friends, and to testify in court concerning insanity. I believe

the practitioners more frequently consulted in mental cases than in many other types of disease concerning which they are more correctly informed.

Until the Act of 1901 persons could be committed to the insane hospitals of Kansas only by a jury verdict finding them "guilty" or mentally sick. This method of diagnosis was so grossly improper that the Act of 1901 provided commitment by physician's commission. This law, however, was but a step in the right direction. It has not relieved the procedure of the court, and officers to enforce the courts' decrees. I recognize the difficulties involved in the problem. That commitment to an insane hospital deprives one of the exercise of his civil rights, and the involuntary restraint of liberty. I do believe, however, that the jury method of commitment should be abolished altogether, and that the commitment should be made entirely by physicians's examination. It requires no court proceedings to send a man, delirious with typhoid fever, or manical with alcoholic intoxication, to a hospital for treatment; why, then, is it necessary that he should be involved in court proceedings to gain admission to hospital for delirium of intestinal intoxication?

But I find I am wandering from the purpose of my paper. It was believed that the physician's commission law would be a great benefit in that it would give physicians an opportunity to examine the cases and furnish valuable medical histories of the cases prior to commitment to a hospital. I regret to have to state that in this the plan has been disappointing. If it is the plain and unvarnished fact that you desire to hear, then I must confess that for value of medical history furnished, the average commission report is no improvement over the old jury statement. Occasionally a report approaches a degree of completeness, but the rule is as above indicated. The law of 1901 provided a statutory form of report. The form is not a good one, it is replete in irrelevant and unimportant requirements and repetitions, yet if it were filled out by the examining physicians in a painstaking and intelligent manner, it would afford most valuable information relative to the history of the psychosis before commitment. To illustrate my meaning: One of these requirements of the legal form is, "Give as precisely as practicable, reasons, evidence and facts upon which the person is decided to be insane." I will quote nineteen answers to this important inquiry taken from nineteen consecutive commitments from Shawnee County. Ten of the nineteen answered the inquiry with the phrase, "See above", this answer when there was very little in

the way of history to "see above" or below either for that matter. Of the remaining nine papers, an imperfect attempt had been made to furnish the information requested. Only one of the nineteen returned it in a manner that covered the purpose of the request. I quote the answer in full: "He is recklessly extravagant, has delusions (fixed) of great wealth and self importance, has periods of mental exaltation, all pointing to the fact that he is a parietic." This answer furnishes valuable information relative to the case, and is complimentary to the understanding of the commission. The other papers should have been made with equal completeness.

In the examination of mental cases, as in the examination of other types of disease, it is important to follow a definite routine method of investigation. The importance of heredity and environment as etiological factors of insanity renders a careful study and report of the family history of greatest importance. This report should include not only evidences of family insanity, but all neurotic conditions, constitutional deficiencies, alcoholism, syphilis and crime. All these findings should be carefully recorded that they may become important items in the case history. The personal history of the patient, previous to the onset of insanity, should be reviewed from the time of gestation. The experiences of infancy and childhood, infectious diseases, head injury, sexual development and habits, personal peculiarities and temperament should all be recorded; the adult life of the patient should be carefully reviewed; the environment and excesses should be considered. Personal idiosyncrasies, exaggerated egotism of youth, temper, habits of timidity and seclusions are all important matters to note.

In gathering all this information covering the personal history of the patient, general questions will not be sufficient, it will require close and detailed questioning of the patient and friends. I desire to impress the value of all this information in making the case record. It is important to fix the date of the onset of the psychosis, and dates of previous attacks. The examination should cover both the mental and physical condition of the person. It will often be found that questions concerning the general health will develop important evidence concerning the mental state. The survey of the body should include nutrition, reduced weight, anæmia, evidences of senility and stigmata of degeneracy; together with trauma, syphilis, alcoholism, nephritis, uræmia, diabetes, tuberculosis and gastro-intestinal disturbance. All these conditions are frequently associated with tox-

æmia, with resulting mental disturbance, and are more important etiological factors than the external influences that are commonly given as the cause of insanity. Careful observation of the muscular and nervous systems should be made. In making the examination of the mental status, a plan of procedure should be followed. The usual arrangement of this outline follows: Inquiry into disturbances of perception, of consciousness, of apprehension, of attention, of memory, of orientation, of train of thought, of judgment, of emotions and of volition. Faulty perception of sensations is the basis of hallucinations and illusions. Auditory hallucinations are the most frequent, though visual, as seen in acute alcoholism, are not infrequent. Any of the special senses may experience hallucinations. Auditory hallucinations can be readily elicited by asking the patient directly if he hears voices, or if his sleep is disturbed by voices, singing or annoying noises. The insane will usually respond to direct questions about disturbed perceptions.

Determination of consciousness or apprehension depends upon the patient's reaction to stimuli. The most common example of faulty apprehension is seen in the diminished acuteness of the aged; they do not understand quickly and are more or less befogged mentally. Disturbance of attention is especially prominent in states of dementia; loss of natural attention is characteristic of the most frequent type of insanity, the dementia præcox group. In this common psychosis, it is often impossible to command the patient's attention. The usual method of testing attention is by progressive adding or subtracting. Have the patient subtract, successively from 100 down to 0, or reverse the test and add six from 0 to 100, attention may be completely suppressed as we find it in states of catatonia.

In the field of memory: Note its impressibility, power of retention, accuracy and tendency of fabrication. Retention is usually determined by questions relating to school knowledge, the multiplication table, additions, historical facts, etc. Impressibility of memory can be calculated by having patient repeat, after a given time, dictated numbers, names and colors. Orientation can be determined as to time and place by questions. Inquire the day of the week and month. Inquire of his location, the character of the house he is in, who are the persons about him, etc.

In the field of thought: The examination includes inquiry into paralysis and retardation of thought, persistent ideas, circumstantiality, flight of ideas, and desultoriness. During the

preceding examination you have had opportunity to judge of the poverty or wealth of thought, also retardation or flight of ideas. If further information is desired it can be elicited by requesting him to repeat a story of recent personal experience.

In the field of judgment: The important evidence of insanity relates to delusions; usually by the time you have reached this stage of the examination the delusions if present, have been expressed or suggested. It is not well to ask direct questions to reveal delusions; some patients are very successful in covering up delusions, or at least in not revealing them. This is often found in states of paranoia; we not infrequently have patients under observation for several days or even weeks before we are able to be correctly informed concerning the delusions present. To unfold delusions it is well to question indirectly; inquire about his home relations, the faithfulness of his wife, his business affairs, have his family and neighbors treated him fairly and kindly; has he committed sins; is he apprehensive about his soul and future welfare. With women, questions about their domestic, church and social affairs will usually develop the line of their delusions, if present. Somatic delusions are uncovered by questions relating to the individual's health and physical condition.

In the emotional field: More will depend upon observation than questions. You will observe the sorrow and depression of melancholia, or the apathy and indifference of dementia præcox, or the elation of mania. Questions can better be directed to friends rather than the patient concerning the emotional attitude. Not much can be learned by asking the patient if he is sad or elated, or if he loves his family, or if he is seclusive, irritable or morbidly frivolous. All these states are better determined by observing the case or interrogating the friends about change in disposition and the nature and degree of the change.

Volitional field; In this, also, one must depend largely upon observation of conduct; observe the voluntary movements; note the response when requested to do some simple act, In the volitional field you will note the degree of pressure of activity, retardation, stupor and muscular tension. Negativistic states, stereotypy and mannerisms can all be detected by observation. In this I have given but an outline of the ground to be covered in examining a case of insanity; a few hints in the method of procedure. My hope is that it will stimulate interest in the subject of mental disease.

A popular mistake found in commitment papers consists in the physician's desire to diagnose the type of insanity and give a prognosis. Both these propositions are quite technical

and usually had better be omitted from the papers. A large proportion of cases are atypical and cannot be classified with certainty by the most skilled alienist. In the N. Y. classification Adolph Meyer has created several groups of allied types. Into these scrap heaps he throws many cases that cannot certainly be classed with any of the established groups. My suggestion is strongly in support of the thought that in examinations for commitment to hospitals, it is of the greatest importance to report the case history fully and intelligently, thinking that no detail of history as unimportant.

DISCUSSION.

DR. L. L. UHLS, (Osawatomie): Mr. President and Gentlemen: I shall not attempt to discuss this paper at length. What little I have to say will be with the idea of trying to impress upon the physicians of the State the importance of being more careful in their examinations of persons believed to be mentally afflicted.

Of course there is not much remuneration for the physician in such cases, yet the hour or two spent on the commission might be considered as fairly well compensated for by the five dollar fee allowed, and the ordinary physician can afford to devote a little time to such examination.

I am sure if the physicians of the state could realize just how difficult it is for us to get a reasonable history of the case from the papers that we receive, they would naturally have a fellow feeling for those of us in whose charge these unfortunate cases are placed and take a little more pains in ascertaining, and reporting the exact status of each case with which they have to deal.

I think there is not a physician here, or any member of this medical society that does know better than to make an answer in their report such as I will quote. The carelessness and incompleteness with which these reports are sometimes made, is probably owing to the rush of work in the hands of the physician.

For instance: This question is often asked: "The duration of the disease?" A good many physicians answer that question: "Permanent." That might be a very complete answer to the question "How long do you think the alienation will last?" but of course is not an answer to the question propounded, and you would be surprised to learn how many physicians have answered the question in that way. In answer the physician might have stated, "about six weeks," or "a year" or "two years" or "ten years" or "since childhood", which would give us some sort of basis upon which to work. I wish to plead the importance of a good, clear history. Dr. Biddle has specified, more clearly than one can hope to do in a mere discussion of the paper, just the different steps that are important in the matter.

I believe that one reason why the physicians of the state do not give much time and attention to these important matters, is because they know they will not be called upon to treat the insane, as the fact is when the patient is found to be insane, he is taken away from the local physician who perhaps is more conversant with his history than any one else, and it is therefore of paramount importance that this history should be communicated to those who will have the charge and care of the patient.

You all know, that when there is acute mental trouble, the sooner the patient can be placed in the Hospital, the better for that patient and you are ready to do that, therefore your interest is not as great as if you were going to take the case and treat it right along. That is the reason you do not take much time, and yet there is nothing that will help those who have the patient committed to their charge, as a full, clear, history of the case, if possible, from the inception of the trouble.

Dr. Biddle has specified the method of filling out the blank reports. Almost all the questions in these blanks are important; the little shades of

difference here and there help us out, and we cannot lay too much stress upon the importance of making these papers as full and clear as possible.

In most cases where a jury trial is had the Probate Judge is quite apt to get for the jury almost anyone who happens to be convenient, and as one of the jurors must be a physician, the Court officer will hurry out and get any Doctor who happens not to be busy or who has nothing else to do. Now if we could have in all cases a Commission of physicians, this Commission could in a measure select their own time of meeting, as in most cases, the matter of a few hours is not strictly important, and the hour set for the examination could be made to suit their convenience.

I do not know about the practicability of Dr. Biddle's recommendation that the jury system be cut out entirely. We now have the dual system, the patient either being examined before a jury, or by a Commission. The constitution prescribes the right to trial by jury before a person can be restrained of his liberty, and that would be one of the things which might be difficult to abrogate. But I believe that the physicians of the state should do everything they can to create a sentiment in favor of a commissions of physicians, because in these enlightened days, we speak of and treat insanity as a disease, and of course none are so well qualified to handle diseases as physicians, therefore a physician must be much better able to pass upon a case of mental alienation than a jury of laymen.

A number of us, who have had the care of the insane, and particularly Dr. Sellers here, have been trying for years to formulate a set of questions, the answers to which would be uniform and certain. We have tried one Legislature after another to get them to adopt uniform papers, so that every person examined for insanity, should have a distinct, definite examination. Every paper filled out by the Probate Judge should be filled out completely and in a certain way. There are certain features in the history of a case which are exceedingly important and which take a little time to ascertain, which time should be taken, instead of filling in the answer "I do not know". I believe we are arriving at a time, when we can secure this uniform system of blanks, if we can get the physicians of the state to cooperate with us in this exceedingly important thing. It is becoming more and more necessary to use discrimination in sending patients to the State institutions, as they are becoming overcrowded. An appropriation was made by the last Legislature for a new hospital, which it will take a couple of years to build and equip. What will we do with the overflow for the next two years? Your poor farms are going to be filled with insane patients before the next two years have expired. If the case of a violent insane patient comes up for commitment to the State Hospital, before that patient can be admitted, it is usually necessary to select a patient not violent, and who can be made comfortable at home, give that patient a discharge or parole, and make room for the more violent case. We are now overcrowded with patients, with two years yet before us in which we can not hope for relief, so that you see the importance of intelligent cooperation by the profession throughout the State to assist us in disposition of these people.

DR. J. W. BOLTON, (Iola): I have no criticism to offer in discussing this paper, because it is an excellent presentation of the subject. It brings to my mind a few things that I think are very important. One of them is this, that a physician who has an acute case, say of pneumonia with insanity following during convalescence, should be cautious and delay sending that person to the asylum. I recently had an experience of that kind which impressed me with the importance of delay in such cases. This patient had a severe case of pneumonia, and during convalescence had an attack of acute mania. I concluded that his insanity was the result of the toxic condition, and in possibly two or three weeks, he became perfectly rational.

Now, with reference to the overflow of our State Institutions. I know something about that, and would suggest as a remedy, that the Medical Society in every county in the State take this matter up and procure the location of Detention Hospitals in convenient places. This is something that we should have, and it is largely our fault that we have no such institutions. By becoming thoroughly organized in each County, every

man working as a unit, we can accomplish these things and can get a Detention Hospital in each county and have the taxpayers foot the bill. That will be of great help to our overcrowded state institutions.

DR. BIDDLE, (closing): In closing, just a word, I do not want to take issue with Dr. Uhls on the jury proposition. Insane persons are sick persons; an insane man has a sick brain, and while on account of the reasonable manifestation of the disease it is necessary to proceed somewhat differently than in other sicknesses, yet I believe the determination whether or not he is sick, should be left to physicians. I do not believe a jury of farmers are qualified to determine whether the man is mentally unbalanced, even with the aid of the advice of the physician who may be upon the jury. The fact that it is a proceeding in Court renders the testimony of the physician of about the same value as is usually accorded such testimony when given in any proceeding before a jury, for they usually give it the same consideration as that of any farmer who gets upon the stand and tells his story. If the insane person is found insane by the process of the Probate Court, I think the diagnosis which admits him to the state institution is essentially the diagnosis of the probate judge, which ascertains the mental state and condition I think you will concede should be made by a physician.

DIAGNOSIS AND TREATMENT OF PARESIS.

DR. L. R. SELLERS, Osawatomie, Kansas.

Read before the Kansas Medical Society, May 5, 1911.

Paresis has several synonyms, among these are softening of the brain; general paralysis; dementia paralytica. These different names often lead to confusion. At our institutions for the insane, we frequently receive patients whose ailments have been diagnosed paresis, who are suffering from senile dementia, from hemiplegias accompanied by dementia—the result of cerebral hemorrhages. When paresis is fully developed the mental and physical symptoms makes such a clear and distinct picture that it should not be mistaken for any other ailment. In the incipient stages, especially cases in which the physical symptoms appear earlier than the mental, the disease might escape recognition and be regarded as a case of neurasthenia. Unfortunately patients in the earliest stages of the disease seldom seek medical advice, and do not call upon the physician until both physical and mental disturbance have appeared. While there is considerable variance in the mental symptoms presented, yet there are a few symptoms that will be manifested in every case.

The first symptoms likely to be observed, are defects in memory and defects in ideation. The patient fails to remember data and the names of his friends. He may remember the date of his birth, but be unable to give his correct age. If requested to write his name, if it contains five or six letters, he may evolve sufficient brain energy to enable him to write the first three or four letters fairly well, then the force is exhausted, and the remaining letters

of his name drift into a scrawl. He may have delusions of grandeur, or less frequently of mild depression, or may not entertain any well defined delusion. But in all instances there is a noticeable cloudiness of the intellect. Characteristic physical symptoms appear only. The organs of articulation are impaired—resulting in speech tremor. There is twitching of the lips, and tremor of the tongue. The consonants are mumbled. Owing to the paralysis of the fine muscular fibres the facial lines are obliterated, causing the face to present a masque like appearance. This is very noticeable to the experienced observer. The knee reflex may be abolished, but more frequently it is exaggerated, followed later on by ankle clonus. Change in the pupils occur early. The Argyl-Robertson pupil is an early symptom, and is generally present. There are but few diseases likely to be confounded with paresis after the disease is fully developed. In the beginning the symptoms may bear a strong resemblance to those of neurasthenia—vague uneasiness, sense of exhaustion. The neurasthenic may present some tremor of the tongue, and if questioned concerning his memory, may say that it is rapidly failing. But a little investigation will prove his memory intact. The neurasthenic's knee reflex may be exaggerated, both is pupillary reflexes will be found normal. The paretic usually presents a condition of self satisfaction, and a feeling of general well being. The neurasthenic is apprehensive, dissatisfied, and broods over his real or imaginary infirmities. In disseminated sclerosis, we have clouding of the intellect and twitching of the muscles. But the twitching in sclerosis is finer and is increased by intentional movement. In paresis the twitching of the hands is coarser, and appears more the result of clumsiness. In alcoholics we may observe the twitching of the lips, and tremor of the tongue but other symptoms of paresis being absent, and a history of a recent debauch will enable us to diagnose alcoholism. In patients presenting the twitching lips, defective articulation, the masque like countenance, Argyl-Robertson pupil, defective memory, cloudiness of the intellect, if a diagnosis of paresis be made, it will prove to be correct in ninety five cases out of a hundred. But in order that we be able to get the best results from treatment, it is desirable that a diagnosis be made earlier. This may be accomplished by an examination of the spinal fluid which is obtained by puncture. The site of the puncture usually selected is found on a line drawn across the back between the crests of the ilia. A needle which should be three inches in length is passed beneath the body of the fourth lumbar vertebra into the spinal

canal. As soon as the needle enters the canal the fluid begins to flow. The fluid should be transparent and free from blood. When three or four c. c. m. of fluid is obtained, the needle is withdrawn. The spinal fluid of a normal individual contains from one to five lymphocytes in one c. m. m. of fluid. In spinal fluid containing between five and twelve lymphocytes per c. m. m. it is considered suspicious of paresis. In fluid containing over twelve lymphocytes per c. m. m. considered absolutely positive of paresis. In paretics you rarely get under thirty-five lymphocytes per c. m. m. Some run to two hundred or two hundred and fifty. So a mistake is not probable. Any other condition in which an increase of lymphocytes are found, can easily be excluded clinically. Hence by this count a positive diagnosis of paresis can be made. There are several methods used in making the lymphocyte count. Fuch's Rosenthal or cell chamber count is probably the best for common use, as it affords a degree of accuracy not so easily obtained by other methods. The technic of making this count is as follows: To prepare the stain—Take methyl violet. 1. Acetic acid. 2. Distilled water 50; Take ordinary red blood counter pipette and fill capillary tube to mixing chamber with stain; then draw the stain into mixing chamber bulb so that it forms a film over inner surface of bulb. Fill bulb of pipette with spinal fluid and shake at intervals for half an hour. White cells are stained blue violet, and the reds that happen to be present are destroyed by the acetic acid. Place a drop on blood counting slide as you would for a blood count. The Tuerk ruling is pre-eminently the best for this, as by counting the whole field irrespective of double ruled space, you get nine tenths of the number found per c. m. m. Nogouchi's butyric acid test is more simple, and can be made without a microscope, but is less reliable than the one given. It is made as follows: two-tenths c. c. m. of spinal fluid in a very small test tube; add four tenths c. c. m. of 10% solution of butyric acid; heat, do not boil. While it is still hot, add two tenths c. c. m. of a 4% normal solution of sodium hydroxid. A positive result is indicated by the appearance at once of a flocculent precipitate, which settles in a little while, leaving the supernatant fluid clear. But cloudiness must not be interpreted as flocculency. This test is simple, but requires an experienced eye to interpret results. So the cell method given is much safer for most physicians. The scope of this paper will not admit discussion of the pathology of paresis, nor the etiology only so far as it concerns the treatment. The epigram coined by Ehrlich, "Paresis is a disease of civilization and syphilization"

fully covers the etiology. Dissipation, over work, and mental stress incident to our modern civilization are factors in the etiology; but without syphilis there would be no paresis. Some years ago writers made a distinction between true paresis and a paresis following syphilis. The latter being called pseudo-paresis. But as investigation progressed from year to year, the percentage of so called pseudo-paresis increased, and cases which failed to give history of syphilitic infection diminished. At the present time the consensus of opinion is that syphilitic infection is a factor in every case of paresis, and in most cases the specific spirilli of syphilis continues to live within the body. It is a law of bacterial diseases that the poison secreted by the organisms stimulate the system to secrete antibodies which destroy the bacteria and render the person immune. And this in part holds good in syphilis. The syphilitic becomes immune against reinfection, and the greater part of the spirochæte are destroyed; but a few may take up their abode in the lymphatic glands and other parts of the body and become walled off in such a manner that the antibodies cannot reach them. Thus protected they live and reproduce their specie indefinitely. Mental stress in combination with syphilis being the cause of paresis, the rational treatment would be mental rest and anti-syphilitic therapy. The paretic should not attempt to transact any business, should be kept quiet and free from worry. The stress of travel and meeting strangers is harmful. The ideal place for him is a home in the country where he meets only his friends. While absolute rest of mind is beneficial, he should have plenty of physical exercise in the open air. Ordinary farm work affords a combination of mental rest and physical exercise. Confined in an asylum he rapidly drifts into dementia. His bodily functions—digestion, secretion and elimination, should be brought up to the best condition possible. In the meantime, special treatment should be directed against the syphilitic factor. The paretic has usually reached or passed the tertiary stage of syphilis, and there is a division of opinion on the use of mercury in this stage. But the iodide of potassium has been a time honored remedy, and has accomplished much good—possibly has effected a few cures. But in most cases, the remedy only mitigates the ravages of the disease. The important treatment is prophylactic. Every physician should bear in mind that paresis may be the sequel of any case of imperfectly cured syphilis, and to guard against this disaster, every syphilitic should be subjected to long, continuous treatment until every vestage of the disease was removed. If possible, should have the evidence of cure confirmed by Wasserman negative reaction.

Ehrlich has given us a remedy for syphilis—salvarsan or "606",—which is almost through the experimental stage, and reports of results are simply marvelous. Many of us who have been long in practice have had many bright hopes that were based upon fads blighted. But when we consider the unanimity of these favorable reports, and the reputation of the investigators, we have reason to believe that in salvarsan we have an agent that not only destroys the spirochæte pallida, but breaks up their breeding places. Possessed with such a remedy we should be able to accomplish effective work in the way of prophylaxis of paresis.

But we must bear in mind that well developed mental symptoms are the result of destruction of brain cells, which can not be restored. Last month I wrote letters to several prominent men asking if they had used salvarsan in the treatment of paresis and the results obtained. I received the following answers:

Dr. Ralph Hamill of Chicago writes, "In reply to your inquiry concerning "606" in the treatment of paresis, I would say that my experience is based on but one case. The disease had progressed but one year, showed merely forgetfulness, lack of ability to hold a position, slight syllable stuttering, tremor about the lips in speaking, quite marked lymphocytosis in the spinal fluid. No achilles and considerable diminution of left knee jerk. Also ulnar analgesia and Romberg. Pupils reacted better to convergence than to light. He received in all, in four doses, 2.2 grams, covering a period of five months. His present condition is certainly an improvement over that in which I first saw him. There is less tremor about the mouth. He is better able to carry a line of thought consistently. There is some improvement in his physical condition, and from a strongly positive Wasserman reaction he now shows slight hemolysis."

Dr. William A. White, Superintendent of Government Hospital for the Insane, Washington, D. C., wrote. "I have your letter of 7th. inst. We have used "606" here in the the treatment of paresis, and I have seen it used elsewhere. My experience is that it is absolutely without value in that disease."

Dr. H. W. Mitchell, Superintendent Danvers State Hospital, Mass., says. "Replying to your letter of 7th inst. I have to say that we have been content to follow the reports of others who have concluded that salvarsan was practically useless in parasymphilitic infections, and we have not used it for these disorders."

Dr. Frank P. Norbury, Superintendent of Kankakee State Hospital, says. "I would say that we have not used salvarsan in the treatment of paresis. We have one patient, paretic, on

whom it had been used before admission to this Institution with no appreciable effect.

My own views based upon the literature sent out by observers in Europe, are that it is not applicable for the treatment of paresis or any organic brain lesion following syphilis."

The evidence of these eminent men leads to the conclusion that salvarsan promises but little, if any relief in fully developed paresis. In Dr. Hamill's case, while the physical symptoms were well developed, the mental symptoms were not so far advanced—merely forgetfulness. The brain cells were probably yet intact. It would be interesting to learn what the future has in store for this patient. When brain disease is clearly manifested by impaired memory, defective ideation, and marked delusions, the day of treatment has passed, and in order to obtain good results, treatment must be rendered before the advent of marked mental symptoms. Therefore the importance of an early diagnosis becomes manifest.

DISCUSSION.

DR. C. A. MEYER, (Wichita): The treatment of paresis by Ehrlichs "606" is as yet in its infancy, and any successful case treated would be of interest to all members of the profession. About eight weeks ago a patient came to Dr. Basham and myself, of Wichita, with a diagnosis of typhoid, probably due to the sluggish condition of the patient's mind, with other symptoms of an indefinite nature. Patient could not carry on an intelligent conversation, seemed very confused, and general appearance was very torpid. Eye examination showed unequal pupils, which responded sluggishly to light and accommodation; speech very drawn out, and unintelligent; gait ataxic, but reflex still present. Our diagnosis was a case of brain syphilis. When going to the operating room the patient had to be lead, as his gait was to ataxic for self locomotion. I injected him with 6-10 grams of salvarsan. In six weeks time in the hospital his mental symptoms improved very much, and in eight weeks he had increased in weight from 128 pounds to 148 pounds; he left the hospital at the end of eight weeks, and went back to his work, that of a horse trainer. I note from his last letter, about a week ago, his general condition is improving very rapidly.

DR. M. L. PERRY, (Parsons): Paresis is one of the most important mental diseases from the standpoint of the general practitioner. The early diagnosis is an exceedingly important matter as the doctor has emphasized in his paper. There are a few of the earlier symptoms on which, it seems to me, he did not lay sufficient stress. These symptoms are of special importance for the reason that they are to be found in the very early stages of the disease before the patient is confined in a hospital for the insane, and while he is still in the hands of the general practitioner. One of the first symptoms observed in most cases is a change in the conduct of the individual. In the very beginning of this disease it is often observed that the patient who has previously been a stable and steady type will begin to be erratic. One who has never dissipated will begin to indulge in excesses. One who has been of an even temper will become morose and quarrelsome with his family and develop an irritable disposition. The pupillary symptoms are also among the earliest to be observed. Dr. Chase in his work on paresis lays special stress on this point. The most dependable pupillary symptoms are inequality, irregularity in size or shape, and a pupil that is fixed and will not respond to light. When these symp-

toms are observed one should always consider the possibility of paresis and should inquire carefully into the case for evidence of syphilitic disease. An early diagnosis of paresis is especially important for two reasons. One is that the patient suffering from this disease should be protected from himself. Not infrequently a man in the earliest stages of paresis, before it is recognized that he is afflicted, will begin to invest in all kinds of wild cat schemes. He will waste his means and sometimes his entire fortune before it is recognized that he is mentally unbalanced. It is also important from the stand point of society that these cases be diagnosed early. A certain number of paretics develop violent tendencies suddenly and are liable to injure some one, often a member of their family. I believe the best place for these patients is in some institution. This does not mean, of course, that they be kept constantly behind locks and bars, but as soon as the diagnosis is made they should be restrained of their liberty and carefully guarded.

DR. SELLERS, (closing): I have nothing further to say.

MATERNAL NURSING.

J. T. SCOTT, M. D. St. John Kansas.

Read before the Stafford County Medical Society, April 1911.

Practically all of the diseases of infancy as well as a large majority of those of early childhood are directly due to disorders of the digestion, resulting from improper feeding. It is apparent from the above statement that a thorough knowledge of the subject of infant feeding in its most minute details is absolutely essential to the best interests of both mother and child. It is not intended, however, in this paper, to enter into a consideration of the subject of artificial feeding, but rather to confine it's scope as the title indicates, to breast feeding or maternal nursing.

Mother's milk is the ideal infant food and has no perfect substitute, hence it is to be preferred to other forms of feeding in the absence of a positive contra-indication. Fortunately, a very large percent of child-bearing women in this country at least are capable of nursing their children and they should be encouraged to do so. Human milk is the natural food for the infant, and is therefore best adopted to it's digestive powers and capacities. The importance and necessity of breast feeding can not be too strongly stated to mothers who are capable of performing that function, and when they are made to realize its double value in giving to their infants increased power of resistance during the perilous period of infantile life, as well as assuring themselves to greater probability of a physiological process of involution, I am inclined to think that very few mothers will desire to be relieved from the duty. There are conditions, however, in which a mother should not be allowed to nurse her infant, much less requested to do so.

Holt says no mother who is the subject of tuberculosis in any

form, whether latent or active, should nurse her infant, it can only hasten the progress of the disease in herself, while at the same time it exposes the infant to the danger of infection.

Nursing should not be allowed where serious complications have been connected with parturition, such as severe hemorrhage, puerperal convulsions, nephritis or puerperal septicemias; where the mother is choreic or epileptic; where she is very delicate, since great harm may be done to her without any corresponding benefit to the child; where it is known that syphilis has been contracted late in pregnancy, since it is possible that the child may not be syphilitic. If, however, the disease was inoculated previous to or at the time of conception, the child should be suckled. In cases of chronic diseases of the skin, such as eczema, prurigo, etc., caries and chronic joint diseases, chronic rheumatism, pregnancy, abnormal milk, where it disturbs the digestion of the infant, and when it can not be corrected by changes in the mothers diet or faulty habits, and of course by changes when no milk is secreted.

In addition to the above may be mentioned cases of abnormal or deformed nipples, where there is an involution or flattening of the nipples, rendering the act of nursing very difficult or impossible. Such conditions can many times be remedied, however, if proper attention is given them during the late weeks of pregnancy, such as massaging the nipples, removing all pressure of clothing, and drawing them out by suction with the aid of a glass nipple shield.

The commonest form of difficulty met in the nursing mother early in lactations is eroded, cracked or fissured nipples. I can not do better than to reproduce an editorial from a recent issue of the Medical World on this condition as follows: "None of the complications of the lying-in chamber gives more pain to the new mother than sore nipples; and none is more trying to the doctor. for the treatment is notoriously unsatisfactory. Many mothers made heartsick by the intense agony of nursing, absolutely refuse to continue it, and place the babe on artificial food, regardless and ignorant of the trouble for themselves and the danger to their infant which always follows the establishment of artificial feeding. Those who persist, despite the pain, frequently suffer untold agonies and are often disfigured by the loss of the nipples through sloughing. The primipara does not know what is before her, and should be instructed how to care for her nipples from the seventh month of pregnancy until after her baby is born. Few doctors make a routine practice of doing this, and the result of the neglect is the infliction of unnecessary pain. Where a care-

ful doctor has instructed the pregnant woman how to care for her nipples, it is exceedingly rare for there to be more than slight tenderness, which is easily borne, and such a doctor earns the deep gratitude of the patient who has suffered after previous confinements with sore nipples, or who has seen other women suffer with them. The sore nipples are enough to impel every doctor to take this slight trouble with every woman who engages him to attend her; and every physician knows that sore and ulcerated nipples provide an avenue of infection for mammary abscess, with all the misery and permanent deformity which it entails.

The best application to toughen the nipples previous to confinement is the glycerite of tannin. This is readily made extemporaneously, in any physician offices, by heating glycerine and stirring in tannic acid till the mixture has the consistency of thick syrup. It is better prepared in a tin box, as it is difficult to mix properly in a bottle. It can be prepared in a mortar or other vessel, but it is not desirable to make any more cleaning up to do than is necessary, and by mixing it right in the box in which it is dispensed, all trouble is avoided, as the glycerin may be heated right in the box. This is applied by rubbing on thoroughly, pulling and kneading gently at the nipple, for ten minutes night and morning for two months previous to confinement. When this preparation is so used, there will rarely be any but the slightest complaint of tenderness when the baby nurses.

Even when no such preparation has been made previous to confinement, no better application can be made to nipples after they have become sore. It is much superior to alcoholic lotions, silver nitrate, tincture benzoin combinations, etc. When the nipples have been uncared for prior to confinement, it is well to have a solution of boric acid on the dressing table, and as soon as the child has been removed from the breast, thoroughly wash off the nipples with this solution; then apply the glycerite of tannin and allow it to remain till just previous to allowing the baby to nurse at next feeding time, when it is washed off with the boric acid solution. The mother, usually, can perform these offices for herself, if there is no nurse in attendance.

It is much better in obstinate cases to withdraw the child from the breast entirely for a time, put on a tight bandage, and treat the nipples until healed, after which nursing can be again resumed. I have frequently resorted to such a method with very gratifying results.

The importance of regularity in nursing should be impressed upon the mother, and correct habits should be formed in the be-

ginning, for upon it the health, development and proper nutrition of the child will depend, as well as ability on the part of the mother to furnish milk that is normal in quantity and quality. Explicit instructions should be given regarding the frequency of nursing and the length of time the child should be allowed at the breast. Of course the directions should be sufficiently flexible to provide for the individual conditions and demands of mother and child, but much deviation will rarely be necessary. Unless contra-indicated by the condition of the mother, the child should be put to the breast in six to eight hours after birth and should not be given food of any kind during the interim. The custom of filling an infants stomach with catnip tea, weakened whiskey, bread, water, fat meat, etc., deserves notice only for the sake of condemnation. If for any reason it is necessary to delay putting the child to the breast, it may be given a teaspoonful of sterile water at intervals of one or two hours to allay restlessness. I have frequently seen the wisdom of such a procedure demonstrated in cases where the child was kept from the breast for two or three days after birth. It is often a difficult matter, however, to restrain the mother in her desire to administer something in the form of substantial food, which can only result in injury to the digestive organs that may persist in varying degrees of severity for an indefinite period.

The child should be nursed at intervals of four or five hours for two days or until lactation is thoroughly established, when the intervals should be shortened to two hours during the day, from 5 a. m. to 9 p. m., and once during the night. This rule provides for ten nursings in the twenty four hours, each of which should be from fifteen to twenty minutes in duration. Where the conditions are normal, such regularity will promote healthy secretion in the mammary glands and perfect digestion in the child.

After the fourth or fifth month the intervals should be lengthened to four or five hours, and nursing in the middle of the night entirely discontinued. It is essential to the mothers health and ability to furnish a good quality of milk that she be relieved of all unnecessary worry and responsibility and have six or seven consecutive hours of sleep at night. Hence the child should not sleep in the bed with the mother, but in a crib. One of the commonest forms of trouble, comes from the nursing infant whenever it cries to quiet it. This will sooner or later result in acute or chronic infantile indigestion. It is by no means uncommon to find that a child is being nursed at frequent intervals during the

entire night. The mother is simply increasing the trouble that she seeks to relieve. The milk may be so modified from violent emotional paroxysms on the part of the mother as to produce acute indigestion or severe nervous disturbances in the infant from which convulsions, acute diarrhoea, collapse and death have been known to result.

The secretion contained in the mammary glands immediately after labor and until lactation is inaugurated does not differ from that of the last weeks of pregnancy. It is of a deep yellow color due to the presence of colostrum corpuscles, is very rich in proteids and salts, has a specific gravity of 1040 to 1046, and is strongly alkaline. The colostrum corpuscles are abundant during the first few days, but in normal conditions are not found after the tenth or twelfth day. The chief value of this secretion is its cathartic action on the child due to the high per cent of salts or, as some authors state, to its indigestibility. It causes free action of the bowels, relieving them of the meconium, and for this especial reason should be invariably utilized.

The secretion of milk is usually well established by the third or fourth day. A knowledge of its character, composition and variations is indispensable in determining its value as a food product as well as a basis for the rules for preparing artificial foods. Its reaction is usually alkaline, sometimes neutral with a specific gravity, ranging from 1027 to 1032. Microscopically there are to be seen fat globules, granular matter and occasional epithelial cells from the milk ducts. According to the most recent authentic analyses its composition is as follows:

Average.	
Fat.....	4.00 per cent.
Sugar.....	7.00 per cent.
Proteids.....	1.50 per cent.
Salts.....	-0.20 per cent.
Water.....	-37.30 per cent.

The average daily quantity of milk secreted under normal conditions is, at the end of the first week, ten to sixteen ounces. By the end of the eighth week this quantity is doubled. From that time it increases but slowly, and at the end of the ninth month there is secreted thirty to forty ounces a day. The average quantity taken by the child at one nursing during the first week is one to one and a half ounces. The quantity is gradually increased until there is taken during the sixth to ninth month six to eight ounces. On account of varying physiological and pathological conditions in different individuals, and even in the same indivi-

dual, the human milk is subject to considerable variation. It is therefore difficult to determine a typical normal standard. It may be stated, however, in a general way, that the milk of the early months of lactation is characterized by a large percentage of proteids and salts, and a small percentage of sugar and fat. That of the later months is characterized by a smaller percentage of proteids and salts, and a higher percentage of sugar and fat. It is a part of the experience of every practitioner to have occasionally an apparently healthy mother who secretes an abnormal milk that disagrees with the infant. It is well to remember under such circumstances that the constituents most liable to variation are the proteids and the fat, both of which are very much influenced by diet, to a certain extent, by habits. A diet rich in nitrogenous matter increases both the fat and the proteids, while a vegetable diet diminishes them. A very rich diet increases the fat and usually the proteids also. Fluids in general increase the quantity of milk. Too little or too great exertion, irregular habits, or marked emotional disturbances often produce abnormal milk that is usually characterized by a temporary increase in the proteids causing colic in the child. It will be noted that the fat and proteids are subject to considerable variation, but that the sugar and salts remain practically the same. Indigestion and malnutrition in the infant, are as a rule, due to changes in the proteids. When the child suffers from obstinate constipation, an examination of the mothers milk will usually reveal a considerable reduction in the percentage of fat. To determine the exact composition of human milk, a complete chemical analysis is necessary. Sufficiently accurate knowledge of the common variations can be obtained by simple methods of examination. If the breasts are full and tense at the time of nursing, it is probable that the supply is abundant; if they are soft and flabby, it is reasonably certain that the quantity is small. A more reliable test is to weigh the child before and after nursing. The cream gauge is sufficiently accurate for determining the amount of fat. In it the milk is allowed to stand for twenty-four hours at the ordinary temperature of the room, when the percentage of cream may be read off. The sugar and salts are practically uniform. The proteids can be estimated approximately from a knowledge of the specific gravity and the percentage of fat. The specific gravity will vary directly with the proportion of proteids and inversely with the proportion of fat. In other words, a high specific gravity indicates high proteids; a low specific gravity, high fat. The real test of the mothers ability to nurse her infant is the physical condition of

the child. During the first week of life the most important sign of insufficient food is the temperature. It is not unusual to find an elevation of from two to six degrees where there is an insufficient supply of nourishment. In the absence of positive signs of illness, a failure on the part of the child to gain in weight should be taken as evidence of inadequate nursing. The gain should not be less than four ounces per week, and if below that an examination of the milk is called for. Other evidences of inadequate nursing are fretfulness, disturbed sleep, crying, irregular and unhealthy looking stools, and where prolonged nursing is necessary to satisfy the child. During the later months the symptoms are those of general malnutrition, anæmia, irregular bowels, delayed closure of fontanelles, delayed dentition, flabby structures, etc. In making an examination of milk, the entire contents of one breast should be obtained, in order to get results that represent the real composition of the secretion. A healthy mother, with well developed breasts that are full and tense at nursing time, whose infant suffers from indigestion, malnutrition, etc., is probably secreting an over-rich milk. In such case it will usually be found that the diet is chiefly nitrogenous, the habits sedentary, with very little open air exercise, and that the mother is taking alcohol in some form, as a result of the mistaken notion that because the child is not doing well the milk must be poor. The indications call for a reduction of the rich, nitrogenous food, an increase in the vegetable diet, more exercise in the open air and the complete withdrawal of alcohol. The condition is more serious when the milk is scant in quantity and poor in quality. This is generally observed in delicate, anæmic women, from whom it is often difficult to obtain a sufficient quantity of milk for examination. Where the specific gravity is as low as 1027 and the cream below three percent, the prognosis is unfavorable. If there are not early signs of improvement as a result of treatment, nursing should be discontinued and artificial feeding substituted. When the condition is incident to confinement or the puerperium, the prognosis is good; but when it is the result of constitutional debility, neurasthenia, etc., improvement is scarcely to be expected. Efforts should be made to improve the general health and nutrition of the mother. Exercise in the open air should be taken regularly as soon as her strength and condition will permit. Iron may be given for the anæmia, and malt liquors to stimulate the appetite and increase the mammary secretion. Massaging the breasts two or three times daily is an excellent stimulant, and takes front rank with many obstetricians.

Where the milk is simply deficient in quantity, the condition is easily remedied by increasing the liquids taken. If, however, the quantity is abundant and the quality poor, there is, as a rule, little hope for improvement for the reasons that the condition is generally seen in women who have been taking large quantities of fluids to improve the milk.

The question of weaning is an important one, to which I can only give passing notice. Nursing should never be continued beyond the eleventh or twelfth month, and, as a rule, not longer than nine months. The milk deteriorates in quality very rapidly after the eighth month and has little nutritive value. Weaning should always be accomplished gradually, never suddenly, as is a rather common practice, unless conditions develop in the mother or the child that demand an immediate withdrawal from the breast. During the fifth or sixth month artificial food should be substituted for one nursing daily. This should be gradually increased until weaning is accomplished.

The elimination of drugs through the milk calls for caution in prescribing medicines for nursing mothers. Those most liable to effect the child are belladonna, opium, the iodides and bromides, mercury, arsenic, the salicylate and cathartics.

GASTRIC ULCER.

CARL A. MEYER, M. D. Wichita, Kansas.

Read before the Kansas Medical Society, May 4, 1911.

The subject of gastric ulcer interests both internist and surgeons; for internist because peptic ulcers furnish the typical dyspeptic syndrome, and to the surgeon because of the great frequency of the formation of gastric cancer on an old ulceration, and the not infrequent occurrence of pyloric stenosis, perforation, perigastric abscess and hour glass contraction.

The scope of this paper permits me to take up only a few of the phases of this important subject, important not only because of the distress to the patient for which they come to us for relief, and the complications of an acute nature but because of the great frequency of the formation of gastric cancer. The histories of patients in our large general hospitals show that at least 10 per cent of gastric cancer give a history of previous chronic gastric ulcer, and pathologically show at least twice that percentage. In the Mayo clinic in the statistics of cases of gastric cancer which come to operation 70 per cent show on pathological examination

a previous ulcerative condition. This alone is enough to justify my selection of the subject matter to be given, viz., the symptoms, diagnosis, and treatment of gastric ulcer.

Symptoms.—The four cardinal symptoms of gastric ulcer are:

1. Pain and discomfort.
2. Vomiting.
3. Hemorrhage.
4. Gastric contents.

and two of minor import namely, the appetite and emaciation.

1. The first symptom pain is the most important one in gastric ulcer, and is often described as gnawing, burning, cramping, stabbing, or simply as a dull ache. Here let me state that pain in the night or early morning hours means usually gastric ulcer. The symptoms begins usually one-half to two, three or four hours after eating, and is usually greatest at the height of digestion. The pain is temporarily relieved by food due to the dilution of the secretion present, by rest in bed and vomiting. In conjunction with pain we discuss the subjective symptom tenderness. The tenderness is usually located between the umbilicus and the ensiform, and if present is increased on pressure. The Boas, head pain point located between the seventh and twelfth vertebra to the left is not of much value because of its infrequency.

2. The second symptom in order of importance is vomiting, and occurs in sixty to seventy per cent of cases. Vomiting usually occurs at height of pain, and hence at the height of digestion, except when the ulcer is located at the cardiac orifice, when vomiting occurs immediately on taking food. Here let me state that in simple hyperchlohydria we seldom get vomiting.

3. The third symptom hemorrhage becomes of great importance only when present. It occurs in about half the cases of vomiting, or in thirty or thirty-five per cent of cases. I need not discuss the various phases of hemorrhages but will here limit myself to the presence of occult blood in the stools. This is of marked importance because with Moynihan I believe that all ulcers bleed at some time in their existence. Allow me to state in view of the above, that long periods of examination over weeks and months for occult blood, speaks against ulcer, and another point of marked importance is when under treatment for ulcer and occult blood is continuously present in the stools, think of carcinoma.

4. **Gastric contents and analysis.** "Stomach analysis have mislead and are still misleading otherwise trusty physicians". The presence or absence of HCL in the stomach contents has been often considered too significant. For a laboratory man to

make a diagnosis of stomach disease from the gastric contents is just as absurd as a specialist making a diagnosis of diphtheria without a culture or a positive smear. The laboratory findings should only be interpreted with the symptoms. In gastric ulcer 50 per cent of cases show a hyperchlohydria, 40 per cent normal, and 10 per cent less than normal. Here I will state that high acidity speaks for ulcer, and that ulcer is very rare in the absence of free HCL. In interpreting these findings we must know that lactic acid is incompatible with free HCL and vice versa, but yeast and sarcina are not. If one were to give in order of value the findings at test meal one would record as follows:

- A. 1. Food remnants.
- 2. Quantity of secretion.
- 3. Location, size and position of stomach.
- B. 1. Acid contents.
- 2. Blood.
- 3. Bacteria.

Here I repeat procure an accurate history of the stomach symptoms and the development of the disease, and with this as a basis interpret the test meal findings.

5. The appetite as a rule remains good, but for the fear of pain.

6. Emaciation may be extreme due to the continuous hemorrhage and lack of food.

Diagnosis.—Before taking up the diagnosis of ulcer I will mention the clinical form so as we may all judge of the wide scope of this special chronic complaint.

1. **Latent Ulcer.** Here we have absolutely no symptoms, and the first trouble may be perforations or hemorrhage.

2. **Dyspeptic Ulcer.** Here the patient has feeling of fullness and weight but no actual pain. Eructations of gas and some vomiting may be present.

3. **Gastralgic form.** Dyspeptic form plus pain.

4. **Vomitive form.** Dyspeptic form plus vomiting.

5. **Hemorrhagic form.**

6. **Stenosing form.**

7. **Cachetic form.**

The histories of patients suffering with ulcer shows that:

1. Most of them have suffered more or less for years.

2. That during the year alternating periods of attack and perfect or partial health are clearly defined.

3. During an attack pain, distress, burning, vomiting, gas, and pyrosis, one or all may be present, and always at a time peculiarly regular for the patient.

4. Anything that engages the acid and neutralizes it or removes it brings relief, as by early hearty meals or alkalies.

5. This regular return of symptoms two to four hours after eating and their control by food, drink, alkalies, vomiting, etc., with the interpretation of the gastric analysis furnish us with a picture peculiar to peptic ulcer only.

The differential diagnosis is a subject too broad for this paper, and I will simply mention the things that are to be differentiated in the order of importance:

1. **Cancer.** And of especial importance is the diagnosis of a benign and malignant obstruction at the pylorus.

2. Gall stones.

3. Simple hyperchlorhydria.

4. Chronic recurring appendicitis with stomach symptoms.

5. Tuberculosis with gastric complaint.

6. Syphilis and tabes.

7. Brights disease complicated with stomach symptoms.

8. Pernicious anemia.

Treatment of gastric ulcer. Medicinal treatment. In the treatment of this disease we must diminish the corrosive action of the gastric juice; relieve mechanical irritation; furnish food of potential value and treat the complications as they arrive. The early diagnosis is of paramount importance for the most brilliant results are obtained up to one and one-half years, and after this the cases respond in ratio to the duration. The first thing to be considered is rest, and this means rest in its fullest sense, and that is in bed. This should be enforced from two to six weeks according to the severity of the case, and after this a modified form for three or four months. For the first four to ten days nothing should be given by mouth, and all fluids taken per rectum. Here let me state that very little nourishment is obtained by rectal enemas.

The diet should be the one that will keep up the food value and one that will still fulfill the indications given. The best food possible is milk and cream in divided feedings. I will outline the dietetic treatment in a given case without complications. During the first twenty-four hours give half an ounce of milk and cream every hour; on the second day give one ounce each of milk and cream every hour; and on the third one ounce and a half, and keep on this diet for three or four days. At the end of this time add one egg in the morning; then two eggs, until we are giving a well regulated diet of milk, cream and eggs; then add well cooked cereals as rice or oat meal, not to exceed three

ounces. This would be the ideal continuous diet for ulcer conditions from the physicians standpoint. In about four weeks change the one hour feedings to two hour intervals, here we add scraped beef, milk toast, custards, small quantities of baked potato, and other articles of diet as we may deem necessary. If it is impossible to use milk and cream, substitute the white of egg and butter, but impress the necessity of divided feedings.

Drugs. Before the morning meal give a teaspoonful of bismuth subcarbonate. The drugs to be given throughout the treatment are sodium bicarbonate and calx magnesia, and it is of prime importance at what time they are given. They should be taken one half hour after each feeding, and if uncomfortable sensation, give during night. Ten grains each are given at a dose. If the bowels move too freely, substitute bismuth carbonate for the calx magnesia, and if constipation exists give one ounce of olive oil, t. i. d. For continuous secretion aspiration is of the highest importance, and for medication give silver nitrate grain $\frac{1}{4}$ and extract of hyoscyamus grain $\frac{1}{2}$ q. i. d. During the course of treatment if continuous pain and constant oozing of blood in stool and no continuous secretion suspect cancer and advise exploratory laparotomy.

The surgical indications for treatment in gastric ulcer are:

1. Perforation absolute.
2. Pyloric stenosis absolute and relative.
3. Reasonable suspicion of cancer.
4. Perigastric abscess and adhesions.
5. Hour glass contraction.
6. In some cases of hemorrhage about 3 per cent.
7. The presence of food remnants in our gastric contents demand surgical consultation.
8. The presence of a tumor in the epigastric region for 95 % are malignant.

When during a prolonged medical treatment the patient still suffers with recurrent ulcer surgery offers the best means of a permanent cure.

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DISCUSSION.

DR. J. D. WALTHALL, (Paola): The paper was a very elaborate exposition of this trouble, and I enjoyed it greatly. There is one symptom that we have been taught to rely upon as an indication of gastric ulcer, that I think the essayist rather overlooked or denies, and that is that the pain in gastric ulcer is relieved by feeding in contradistinction to the aggravation of the pain where the disease is really cancer. This symptom of cessation of pain is due to the fact that the ulcerated parts lie together in an empty stomach, while in a full stomach they would be separated. If I am wrong in placing any dependence upon that symptom in the matter of differentiation between ulcer and cancer, I would be glad to be set right.

DR. G. W. JONES, (Lawrence): I do not know whether the essayist is inclined to lay much stress upon the medical treatment of gastric ulcer, or not. I think possibly, if there were any medicines that could be depended upon to cure the ulcer, if that ulcer happened to be in the farther end of the stomach, it would require a surgical operation to relieve the obstruction after the ulcer were cured.

I am more and more inclined to believe that the salvation of the patient lies in anticipating the pre-ulcer condition and I want to urge this on the profession: To anticipate this hyper-acidity that always precedes the ulcer. The ulcer is not the cause of the hyperacidity, but by reason of this hyperacidity together, possibly, with some trauma that we do not exactly understand, there ensues necrosis of the mucous membrane, then of the deeper structure, until we have a more or less extensive degree of ulceration.

Now if we are going to do anything for this patient, without surgery, we must do it before the ulceration occurs.

In a small number of cases you will do some good with the treatment that the Doctor has outlined, which I know to be very good, indeed; but in a vast majority of cases, you will aid your patient in a far greater degree by anticipating this ulcer stage.

And finally; if you have under your care, a case which, to your best knowledge and belief has reached a stage of very probable malignancy, you are limited to barely three, or at most four men in the United States to whom you have a moral right to refer your patient. Kansas is full of surgeons who are successfully doing gastro-jejunostomies for non-malignant conditions, but, the number of men who are doing successful surgery on the stomach for malignant conditions advanced beyond the most primary, is small indeed. Others may explore, and close up, but at the same time, sacrifice the patient's chances for life saving surgery, even at the hands of a master.

DR. GEO. L. HAMILTON, (Kansas City): While my experience in these cases is not extensive, I believe that the sooner we abandon medical treatment in cases of gastric ulcer, the better and safer for the patients. While abroad last year, I was called to Germany to treat a case of gastric ulcer. The patient has been treated medically for years, with apparent relief for a time, but the disease evidently continued to increase in severity, and finally has reached a point where surgical interference was impossible and of no avail, because of the degeneration of the ulcer into a cancerous condition with a rapid destruction of the tissues.

DR. E. SMITH, (Lawrence): In the course of my practice, I have been brought in contact and have treated quite a number of cases of ulcer of the stomach. I have known quite a good many of them to recover with medical treatment and be permanently cured. I do not understand, that even surgical interference will always insure no recurrence of the disease.

I had one case since I have been in Lawrence of an old physician with an ulcerated stomach, where the tumor was so large I felt certain it was cancer and urged an operation, but he positively refused to permit it, so we had to treat him the best we could. He had a great deal of hemorrhage, but finally recovered and has remained well ever since of that trouble. I know of other cases which recovered in the same way, and remained well.

DR. JOHN L. EVANS, (Wichita): Sometime since there was a case referred to me which I diagnosed as gastric ulcer. It was a male patient, who had gone to some springs for treatment and had been taking a course of baths. While at that institution, he had a number of hemorrhages and became so weak, that the authorities of the institution refused to permit him to continue this bath treatment, and finally put him on the train and sent him home. As he was nearing Wichita, he had a severe hemorrhage, and was then sent to the hospital and came under my care in a very weakened condition from this last hemorrhage. We put him to bed, kept him absolutely quiet; put an icebag over the region of the stomach and administered rectal food, not allowing any food to pass through the mouth. The man was then in no condition to operate upon, or at any subsequent time after he entered the hospital, and in a day or two after his admission he suffered another hemorrhage and died.

I believe there is danger in persisting in a course of medical treatment when you have a tendency to hemorrhage.

There is another point that I would like to mention, and one which is very important in making the diagnosis of a condition of the stomach from gall-bladder trouble. In gall-bladder trouble, you have most prominent symptoms in the line of digestion, just like you have in gastric ulcer. I think, therefore that there are sometimes mistakes made in differentiating between biliary calculus and ulcer of the stomach in this matter of diagnosis, because of the similarity of these symptoms.

A case came into my hands sometime since, in which two surgeons had made a diagnosis of gall-bladder disease, in which I concurred. But on operating, I found that the patient had a perforation on the posterior wall of the stomach, which had been in existence some years. After the operation, by going a little deeper into the history, it was ascertained that this perforation had evidently occurred some 20 years previously, and there was extensive adhesions in the upper part of the abdomen including an area around the gall-bladder, but there was no disease apparent involving the gall-bladder, excepting these adhesions which would naturally occur.

DR. MEYER, (closing the discussion): In the surgical treatment of hemorrhage from a gastric ulcer, I believe nearly every one will bear me out that only three to five per cent are operable. In case the ulcer is located at the pyloric end of the stomach, surgery will do good, because the irritation due to the passage of food over the ulcer will have been removed. In case however of peptic ulcer located in other parts of the stomach, from which hemorrhage is taking place, I believe a strict medical treatment should be instituted.

A great many failures following gastric surgery are due to the surgeons not following out the necessary treatment. I believe it is wrong after a patient has suffered for several years and operative work has been instituted, for the patient to continue any diet he wishes. I believe the best results can be secured by following a rigid dietetic treatment after all gastric operations. Another thing I wish to add, and that is that one should be very careful in diagnosing a stomach condition and neurosis, for a good many of these cases are going to surgical operation, and we find instead of a stomach condition, that there exists gall-bladder trouble, chronic appendicitis, or an enteroptosis.

APPENDICITIS FROM A PRACTICAL STANDPOINT.

DR. W. F. COON, Caney, Kansas.

Read before the Southeast Kansas Medical Society, April 11, 1911.

In taking up the subject of appendicitis from a practical standpoint I shall not go into detail with etiology, symptoms, pathology or treatment, but shall try to take it up in a practical way as cases present themselves to us in our every day practice.

No doubt many or most of you have had much more experience with this class of cases than I have, but it is an interesting subject to me, and one that causes me a great deal of anxiety, probably because in my own experience, have had and seen many more pus cases than simple catarrhal and that we can never predict the exact pathological condition that exists or which way many cases may terminate, and one that I believe that requires a good deal of judgment in handling in order to do the right thing and the best thing for our patient as the case presents itself.

You are all familiar with the etiology and pathology, though under pathology the classification differs somewhat by different

authors and it is unfortunate that we have so many classifications of appendicitis for it is unsafe to examine a patient and then conclude that we have a certain variety of appendicitis and base our treatment on this classification.

The time to classify is after the removal of specimen, and not before. The question not of pathology or etiology, but what to do for the patient's good. If we could all make an absolute diagnosis we should all know what to do. The most eminent surgeon, Dr. J. B. Deaver, Philadelphia, while giving a clinic, asked what conditions he should find when he opened the abdomen in a certain case, and the students glibly told what the pathology would be. Dr. Deaver said, "I talked like that when I operated on three hundred cases of appendicitis, but since I have operated upon over four thousand, I do not know what I am going to find before I make the incision."

The symptoms are pain, which may be colicky, sharp, dull or aching, tenderness, rigidity, temperature, nausea and vomiting, constipation or diarrhoea, etc. I believe the three cardinal symptoms of appendicitis are pain, tenderness and rigidity.

Fowler says pronounced tenderness in right iliac fossa is almost as pathognomonic of appendicitis as rusty sputum is of pneumonia.

The diagnosis of appendicitis is usually easy in most cases, though we may have to consider in differential diagnosis intestinal obstruction, typhoid, disorders of uterus and adnexa, movable kidney, renal colic, catarrhal or suppurative cholecystitis, gall-stone colic, acute indigestion and enterocolitis.

Some important points to bear in mind in the diagnosis of appendicitis is the fact that the temperature of a patient is a matter of no consequence as giving any clue to the condition of the appendix for recovery may follow a temperature of 105, and death may occur with one nearly normal.

Nausea and vomiting are present in the majority of cases, but it does not furnish any information as to the seriousness of the case.

Symptoms in a case of mild catarrhal appendicitis cannot at present with certainty be distinguished from those marking the onset of cases of the gravest type.

Pulse usually high and I believe furnishes us considerable information and danger signal. A pulse approaching 100 in an adult should be watched very closely. A pulse of 120 indicates considerable infection and according to some is an absolute indication for operation. Rapid feeble pulse, without rise of temperature sug-

gests gangrenous or septic process. If it is small, bad, about 115 in adult, or 125 to 130 in a child, with a temperature of 100 or even 99, if the disagreement increases, the pulse increasing in frequency as the temperature falls, no matter what the apparent benignity of the other symptoms may be, all hesitation must be laid aside, any delay may be fatal, operate at once. A disagreement may render itself evident in the increased ratio, temperature remains high while pulse falls to 60 or even 50, the signification is the same. These indications depending upon the pulse are not absolutely constant, it is true, but in the great majority of cases when carefully studied their value is undeniable.

If suppuration is present and perforation occurs on the fourth or fifth day, that is after adhesions have formed, the symptoms do not as a rule vary from those enumerated.

Danger may exist without being shown by pulse or temperature, pulse, temperature and pain may decline making the occurrence of effusion, deceptive calm, patient feeling better, the sudden access of intense localized pain indicates a dangerous change in local conditions.

If perforation has occurred early that is, while the adhesions were still imperfect, there is usually a chill, vomiting, shock more or less profound, diffused marked pain instead of localized pain, acceleration of pulse, increase of temperature or sub-normal, scanty dark colored urine with high specific gravity.

Leucocytosis is of considerable value and should be given a trial. Leucocytosis of 20,000 or more indicates operation. If there is no leucocytosis the case is either not one of appendicitis, or one of catarrhal form and extremely mild or very severe and gangrenous patient being in a moribund condition. It also helps one to differentiate non-suppurative lesions, such as simple colitis, typhoid, ovarian neuralgia, impaction of fæces, floating kidney, etc.

The two frequent complications of appendicitis are abscess and peritonitis. The others, such as suppurative pylephlebitis causing multiple hepatic abscesses, thrombosis or compression of right illiac vein, hemorrhage from perforation, or necrosis of illiac arteries sub-phrenic abscess with possible perforations of diaphragm, resulting in suppurative pleurisy or pericarditis. Appendicitis in hernial protrusion we consider quite rare.

Examination through the rectum is of value in determining the presence of pus in advanced cases. In the earlier stage this procedure is of little or no value.

Where no mass can be felt in the region, it is impossible cor-

rectly to diagnose a perforation or gangrene. Where the mass can be felt and persists longer than two or three days without diminishing in size or indeed even increasing, it always has pus for a nucleus.

A. J. Ochsner gives us the causes of diffused peritonitis complicating appendicitis as follows: "Peristaltic motion of the small intestines is the chief means of carrying the infection from a perforated or gangrenous appendix to the other portions of the peritoneum changing a circumscribed into a general peritonitis. This can be prevented by prohibiting the use of every kind of food and carthartics by mouth and by employing gastric lavage in every case in which there are remnants of food in stomach or in the intestine above illeo-cæcal valve as indicated by a presence of nausea and vomiting or meteorism. This form of treatment if instituted early, especially at height of septic stage, though I can't see that gastric lavage is indicated in every case, will often change the most violent and dangerous form of acute appendicitis to one that can be handled with comparative safety. This method is given us that nature will protect the uninfected parts by adhesions. In some work that I have done on the dog I have seen adhesions. form, though not firm, in from three to six hours, showing us what may be accomplished if we will only give her a chance.

We are all now quite unanimous in the opinion that appendicitis is a surgical disease and ought to be operated on. The date alone of operation may vary. In a certain number of cases during attack, but as often as possible during the interval. We are all quite unanimous in the opinion that operation is the safest and therefore the best treatment for appendicitis during the first forty-eight hours, earlier the better, but there is still a great diversity of opinion as to the best method of treatment after the first two days.

It so often happens that these cases are not seen for three, four or five days from beginning of the attack, when the infection has extended beyond the confines of the appendix, the best we can do is to assist nature in her efforts to bring about a cure. The question we are all striving to answer correctly is, how can we best assist nature. The measure of our success is not the amount of surgery we do, but the number of lives we save.

Many lives have been sacrificed in efforts to do too much.

Isn't it better to have a live patient with numerous drainage tubes and a profuse discharge of pus, than to have a dead one with a thoroughly washed out belly, and a beautifully closed wound.

The ideal treatment without operation to assist nature as we are not always able to gain consent of patient, if operation is indicated, and in cases after operation especially where peritonitis exists, is the treatment by immobilization.

General immobilization of the body in dorsal position, immobilization of the intestines, these are indeed the essential factors in rational treatment and are only means of influencing the progress of disease without food, and above all things cathartics, continuous application, or nearly so, of ice to abdomen, careful examination and close supervision and where peritonitis exists, Murphy's treatment of enteroclysis of normal saline by drop method.

Nature has put the intestines at rest and we are interfering with her whenever we give cathartics. We all feel better when the patient's bowels move because this is an indication that he is better but nature knows when and how to do this better than we do, and we should not interfere. We should remember that the patient's bowels move because he is better, and that he is not better because his bowels move.

The subject of cathartics has been of interest to me because I have seen them used more in the two years I have been in Kansas than all my experience in Minnesota. It simply interferes with nature in bringing about a cure.

This form of treatment may have some or many advocates and many cases will no doubt get well by constantly giving cathartics. Is that to our credit? No. Those kind of cases would have gotten well if they never had any cathartics. I heard this point brought out very emphatically at the St. Louis meeting last June by such men as Murphy, Oschner, Crile and others condemning the giving of cathartics from every point of view.

Personally if a case is seen early within the first few hours, and you feel certain that the trouble is strictly confined to the appendix and has not reached the height of septic stage, unloading bowels by enema may be advantageous, but we never know how soon perforation may take place, or what progress the disease is going to make. I recall one case of acute perforation from beginning of attack, operation after eighteen hours, found appendix congested and perforated at end, filled with fecal matter, pus in abdominal cavity, with beginning peritonitis, recovery following appendectomy and drainage.

The following case may illustrate this point; girl, aged 14, past history negative, except that she had had constant pain or soreness over appendix for nearly a year. Seven days previous

to time she was brought to Caney, she was seized with acute pain, never subsiding. During that seven days she had been given large doses of mild chloride, nearly every day, and was in such hypnotic condition from opiates that she was unable to be aroused, nor was I able to make out her present condition. Temperature 102 to 103, pulse 110. On waiting until next morning advised operation and believed trouble was confined to appendix. Appendectomy was performed, eight day, very little adhesions were found, some colitis was found, about one-half dram of dark colored pus was found within the appendix, recovery complete.

Now where was nature assisted by giving cathartics in bringing about adhesions around appendix, as we know this is nature's way of protecting peritoneum. This appendix may have ruptured any time from beginning of attack, and caused general or diffused peritonitis and possibly death.

None of us would go about working or swinging our hands with an acute infection of same, or even the finger, why should we do so with our appendix or any one's else, and having same swinging like a pendulum?

When we see a case on the third, fourth or fifth day and find patient doing nicely, that is with a temperature of not over 102, pulse below 100, no acute pain, some tenderness, slight or no rigidity or distention, what is our duty? This is the class of cases in which waiting is advised by many, so that nature may build up a better protecting wall between the infected and uninfected portions of peritoneum.

If operation at this time is performed, the operator should be content to remove the appendix and establish drainage for an effort to do more subjects the patient to greater danger, than he would have been in without an operation.

When called to see a case on the third, fourth or fifth day and patient doing badly, temperature over 102, pulse above 100, pain, tenderness, rigidity which has not subsided or even increasing, it is our duty to operate, because these are nature's signals of distress, indicating that she needs help.

When we are careful to assist nature, we will save many cases, which next to those beginning with rupture or gangrenous appendix are the most dangerous we have to contend with. The removal of the appendix and establishment of drainage meet the indications. Anything more is meddlesome surgery.

The following case will illustrate. Patient seen on fourth day temperature of 102 to 103, pulse 120 abdomen distended and rigid, abdomen opened in right iliac region and a gangrenous

appendix removed, a second opening was made in median line, pelvis and both loins were drained with large rubber tubes, patients improvement was prompt with free discharge of pus. The appendix was sloughed off flush with cæcum, but owing to the soggy condition of bowel, and bad condition of patient, no effort was made to sew up opening in cæcum. At two different times a small amount of fecal matter escaped from wound, but eventually closed. I am confident that either delay or a protracted effort to close the opening in bowel would have resulted in death of patient.

When a case is seen at a late date, when whole abdomen is swollen and boggy, and a so-called general peritonitis exists, what is our duty? These patients do not all die, if they are not operated upon, but a helpful operation is surely indicated. I believe that an attempt to do radical surgery at this time is dangerous, and it has been demonstrated that it is not necessary, that is, the breaking down of extensive adhesions and irrigation of peritoneal cavity.

Two or more openings should be made and large drainage tubes introduced, extending into both flanks and bottom of pelvis, appendix should be removed if it is convenient, but an extensive search for it is more dangerous than advantageous.

The following cases will illustrate: Male, aged 24, diagnosis general peritonitis, complicating appendicitis, duration ten days when first seen. Five days previous pus discharge from rectum for three days, when condition became more grave. Operation was performed same day when first seen as the last and only hope of saving the man's life. No appendix was found, pus seemed to be everywhere, purulent lymph resembling diphtheritic membrane deposited in patches on intestines, indicating beginning gangrene, broke up some adhesions enough to get to bottom of pelvis, and behind cæcum. Three large drainage tubes introduced in different directions, through two openings. Drainage good, fistulæ developed, and pus discharging from rectum. Death on fifth day following operation. Postmortem, general diffused peritonitis, extensive adhesions, several gangrenous portions and sections of bowels, and appendix sloughed off leaving fistula two sub-phrenic abscesses in region of liver and spleen. This was a helpful operation and while I did not hold out any hope, it no doubt prolonged his life that five days, and gave the man his only chance.

I desire to report another case that occurred during my hospital experience, which will show what may be accomplished

at times in desperate cases: Patient, woman about thirty years of age, and mother of three children, was seen first, time on fourth day of her illness, with consultation same day; diagnosis of a well-marked appendicitis, but with a moderate temperature and pulse. It was advised waiting for a time, because an abscess was evidently forming, and in order to reach it at that time, it would have been necessary to go through the healthy peritoneal cavity. Owing to the attending physician being called out of the city, there was a longer wait than was intended. In the night of the ninth day, while turning over in bed, the patient was taken with severe pain, followed by collapse with high pulse and sub-normal temperature, evidently due to rupture of abscess into general peritoneal cavity. She was given salt water injections and strychnia, and later in day, was carefully removed to hospital. The same treatment was kept up through the night, because the patient was so low that operative interference seemed unwarrantable. The next morning the pulse was 160, her temperature sub-normal and she was so toxic that she could not answer questions intelligently. Her skin was cold and clammy, and whole abdomen distended and hard. It looked as if she would surely die, but she was making a brave fight, that it was thought best to lend nature a helping hand. The patient was in no condition to take anæsthetic so under cocaine two openings were made, one over original abscess on right side, another in median line. Through the first opening the old abscess was drained. The appendix could not be felt, and was not sought for. Through the median opening, large soft rubber tubes were introduced into the left flank and to the bottom of the pelvis. There was a free discharge of pus. Patient soon began to improve and at end of month she went home with her wounds healed. No effort was made in this case to break down all adhesions and no irrigating was done. This may not have been brilliant surgery, but it was helpful surgery, and saved this mother for her three little children.

Concerning the removal of the appendix in certain abscess cases, with severe sepsis, it is best to leave it alone, for in such cases it very seldom gives any further trouble.

One is often astonished and alarmed by the extent of the lesions which are discovered, and by their contrast with their results of the external examination.

In general peritonitis we may meet with that brownish, turbid dirty fluid, bathing the intestinal coils with scarcely a trace of adhesions which indicates the most malignant form of peritoneal infection, or again to see the intestines covered with purulent

lymph and after separation of some adhesions, stream of pus flows from all parts of the peritoneal cavity, indicating another variety, viz., diffused peritonitis, a variety which is not so absolutely hopeless.

Cases of appendicitis on the fifth or sixth day, sometimes as late as the eleventh or twelfth day, cases of appendicitis with sudden onset, but deceptive course, without striking reactions, without high fever, without vomiting at least in early days, simulating a benign course or even actual improvement, has thrown the observer on the wrong scent. In these cases of peritonitis of appendicular origin, the question of limitation of operations sometimes arises.

I believe the only contra-indications to operation are the certain signs of approaching death, the coldness of extremities and the disappearance of pulse.

That recovery is quite exceptional is undisputable; that death may be inevitable in that variety of hyper-acute peritoneal infection, in which turbid, brownish fetid fluid which has been compared to dirty beef tea, is found in the peritoneal cavity. We have no means of contesting, but we can never know in advance what we shall find in the peritoneal cavity, and often the patients are young, and possess quite unexpected vital resistance. If they can bear the incision of the abdominal wall with saline solution subcutaneously or intravenously, it is our duty to give them that last chance.

The pressure within the abdomen is about sixteen pounds to the square inch, and pus is bound to follow the line of least resistance which is along the tubes through the openings in the abdominal wall. One serious mistake often made is to plug the openings with gauze and call this drainage. Gauze does not drain pus, and when pus escapes in presence of gauze, it is in spite of of gauze, and not by virtue of it. Pus escapes around the gauze, and not through it. We use gauze in the abdomen to protect the uninfected parts from pus because we know that pus will not readily penetrate the gauze, therefore it is absurd to expect gauze to drain pus.

In speaking of secondary abscesses as they are bound to occur, in a certain percentage of appendiceal abscesses by every one at times during their experience. We should not stand by and let patients die, or let abscess rupture into rectum, bladder, vagina or cæcum. Much has been accomplished of late by rectal section in the male and is no more dangerous than vaginal section in females, that it conserves the vitality of the patient, hastens

his recovery very greatly and helps to prevent that very dangerous condition, sub-phrenic abscess.

Some have been draining the cul-de-sac by incisions through the perineum, keeping well to the side to avoid the bladder, ureter and seminal vesicle. The trouble with this is that most of us are not good enough anatomists to make this deep dissection. Then again, it is not necessary, when we have an easier method with the results the same. With rectal section I have had no experience, but would not hesitate to do same, if case presented itself.

In closing we must respect the teachings of Dr. Murphy. In all these cases when there is present a danger of peritonitis, and remove the source of infection, put patient in Fowler's position, and give constant enteroclysis per rectum.

SYPHILIS AS SEEN AND TREATED BY THE GENERAL PRACTITIONER.

DR. G. A. BLASDELL, Garnett, Kansas.

Read before the Southeast Kansas Medical Society, April 11, 1911.

Syphilis is a contagious disease. It is also transmissible by heredity. It first manifests itself, except in case of heredity, by an indurated and infecting chancre, followed by general lymphatic enlargement afterward by eruptions of the skin, usually symmetrical and at first superficial, and by altered conditions of the mucous membranes, later by chronic inflammation and infiltration of the cellulo-vascular tissue and bones and periosteum, and finally by special productions in the form of small swellings, which may invade any tissue or organ of the body and are known as gumma. By most writers this disease is divided into a period of incubation and three periods known as primary, secondary and tertiary. The period of incubation is the time from infection to the first appearance of the chancre. The average length of this period is about four weeks. The primary stage is that period from the first appearance of the chancre to the appearance of the secondary symptoms, and is of about six weeks duration. The secondary period may continue an indefinite time. Usually from one to three years when there is a quiescent period of indefinite length, after which, may occur the tertiary period. Some patients may never pass through the tertiary period but may go on to recovery. In going over the literature I have not been able to determine the percent of recoveries, after the se-

condary stage, without treatment, Syphilis is not, necessarily, a venereal disease, but it is usually contracted in the sexual act. The chancre make its appearance at the point of entrance of the virus. The spirochæta pallida is now accepted by most investigators as the cause of syphilis. The skin or mucous membrane must be broken before it can gain entrance but the abrasion may be microscopic in size. The chancre, in the male, is usually situated in the sulcus just back of the corona. It may be on or at one side of the frenum or on the fore-skin or in the meatus. About one half of the cases of syphilis, in the male, are seen by the physician in the primary stage. But very few cases in the primary stage, in women are seen by the physician. In the female the chancre is located on one of the labia, the vaginal wall, the vaginal portion of the womb or cervical canal. The chancre is an indurated sore, not painful and is but slightly ulcerated. It feels like a split pea in the skin or mucous membrane, is papular and usually circular in form. One can not always make a diagnosis of syphilis from the character of the chancre but if the sore has not been cauterized and is fully developed when seen the diagnosis can be fairly positive. A microscopical examination for the spirochæta being made and it being found makes the diagnosis positive. But the general practitioner is not always so located that he may have the service of the pathologist, and may not be able to make a positive diagnosis until the secondaries appear. The chancre is seldom seen by the physician, in the female, because it is painless and its location is such that it does not attract the attention of the patient and she does not consult her physician until the secondaries appear. I have only seen the primary sore in one female and that was because I was treating her husband and examined her very carefully for it. It was located on the labium minora and could have been overlooked very easily. The chancre needs very little local treatment. Simple cleanliness and to be dusted with calomel two or three times daily. The chancre may be extra genital I have seen two such. One on the lip of a young woman and one on the thumb of a physician. The chancre usually heals in from four to six weeks if patient is under treatment and it is kept clean, but the induration may persist for years. The secondary symptoms appear about four weeks from the appearance of the chancre. The patient begins to have fever and chilly sensations, headache and the lymphatic glands in the groin on the side on which the chancre is located becomes involved, swelling not suppurating. As a rule only a few glands are involved. This is the syphilitic bubo. The

lymphatic vessels leading from the chancre to the glands become inflamed and feel like a wire under the skin. The eruption appears about six weeks after the chancre is discovered. Mucous patches appear in the mouth, there is a general glandular involvement and the hair comes out. The eruption is usually macular and of pinkish or redish color. It may be papular or tubercular. It usually appears first on the chest and spreads over the body. It is not very noticeable on the face or hands. It may be so slight that it is overlooked. When looking for the first appearance of it the patient should be turned so that the light strikes the chest from the same side as the physician is looking from. A hot bath may make it appear more plainly. If treatment is neglected the eruption turns dark becoming almost brown in color. The patient suffers from general pains and he complains of his "bones" aching." This stage, as I said before, may last for a number of years if untreated. The most dangerous time for the patients spreading this disease is first, from the chancre in the sexual act, then in the secondary stage from mucous patches. The normal secretions are not infective, but, the blood is. The patient should be warned against using cups, towels, spoons, etc., that other parties might use. If this period is untreated or insufficiently treated it goes on to the tertiary period, when gumma appear, break down and ulcerate or cause pressure symptoms, Later para-syphilitic symptoms appear. They are locomotor ataxia, paresis, changes in the blood vessels, etc. The patients present themselves to their physicians in all stages of the disease, from the chancre to the gumma, etc. The diagnosis may be very easily made or it may be very difficult. If the physician is so situated that he may have the aid of the pathologist, a Wasserman test may help clear up the diagnosis. A word as to hereditary syphilis as the general practitioner sees it; he, of course, sees the still births and abortions, the macerated foetus etc. The syphilitic babies usually do badly. They suffer from faulty nutrition, may become emaciated and shrivel up like a little old man and die. They may have keratitis, iritis, eruptions, etc. The treatment of syphilis consists in the proper administration of mercury in the earlier stages and iodide of potassium in the later periods. When a patient comes under the physicians care in the primary or secondary period the proto-iodide of mercury should be given. It should be given in pill forms, 1-6 of a grain after each meal to begin with and increase the dose one pill every third day until such dose is being given that will make the gums sore or cause excessive bowel disturbances. When this dose is reached

it should be cut in two and just half that amount be continued for at least two years and three years is better. After the patient has taken the mercury for two years, the iodide of potassium may be added to it, and the mixed treatment continued for a while. If the mercury causes excessive griping the griping may be controlled by suitable doses of opium. The patient should be instructed in the proper care of mouth and teeth, which should be kept scrupulously clean. If patient is anemic, a tonic should be given and the special symptoms should be looked after as they arise. Salvarsan, Ehrlich's "606", may prove to be the much hoped-for remedy for this disease. Can syphilis be cured? This question has not been answered yet. Some cases recover so far that they are able to contract the disease the second time. I have had two cases in women, who after taking the mercury as above, have given birth to healthy children. The children with hereditary syphilis should be given mercury in the form of gray powder and the syrup of the iodide of iron. All cases of syphilis should be kept on treatment until all symptoms subside and if the symptoms recur the treatment should be given again for some months after the recurrence has been controlled.

I have not spoken of the hypodermic method or inunctions of mercury because the general practitioner is very seldom required to give it in any other manner than by the stomach. I have seen one case where I thought it necessary to give it hypodermically. This was a case of cerebral syphilis where the rapid action of the drug was required. In closing will say that syphilis is no respecter of person and we may find it in the palace as well as in the hovel, and it to be hoped that "606" is the specific for this dreadful disease but time is required to prove it.

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Itching.—Ralph Bernstein recommends a lotion composed of pulv. calamine, pulv. zinc oxide, and glycerine, of each a dram, to four ounces of lime water. It should be well shaken before applying, and be applied by pouring a little of the lotion into a saucer, moistening a piece of linen with it, and simply dabbing the itching surface. Cotton cloth absorbs too much of the lotion.—Medical Standard.

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The standard solutions of nitrate of silver for use in gynecological practice are as follows: 1. For the cervix, 40 grains to the ounce. 2. For the vagina, 30 grains to the ounce. 3. For the external genitals, 15 grains to the ounce.—Inter. Journal of Surgery.

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EDITORIAL

Thoroughness is second only to ability.

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As was predicted some time ago the ophthalmo-tuberculin reaction has been supplanted by the cutaneous method. Certainly there can be no valid excuse for endangering the integrity of the eye with a diagnostic procedure, when the skin reaction is just as positive and without harmful consequences.

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It is just as easy to go through life looking for the good and the beautiful, instead of the ugly; for the noble instead of the ignoble; for the bright and cheerful; instead of the dark and gloomy the hopeful instead of the despairing; to see the bright side instead of the dark side. To set your face always toward the sunlight is just as easy as to see always the shadows, and it makes all the difference in your character between content and discontent, between happiness and misery, and in your life, between prosperity and adversity, between success and failure.—Orison Swett Marden.

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A crusade has been started against the use of the roller towel in public places. Kansas as usual, through the secretary of the State Board of Health, is first in preparing to get rid of this disease breeding article. Many cases of severe diseases of the eye,

some of which have ended in blindness, as well as a large number of skin affections, have been directly traced to the roller towel. There certainly is no excuse for its use and the sooner it is cast away to abide with the common drinking cup, the quicker we get rid of another avenue of infection. Following is the ruling of the State Board.

ABOLITION OF THE COMMON TOWEL.

Ruling by State Board of Health.

That the use of the common roller towel in hotels, railway trains, railway stations, public and private schools is prohibited on and after September 1, 1911.

No person or corporation shall place, furnish or keep in place in any hotel, railway train, railway station, public or private school, any towel for the common public use, and no person or corporation in charge or control of any such place shall permit in such place the use of the common towel.

The term "common towel" as used herein shall be construed to mean roller towels and towels intended or available for common use by more than one person without being laundered after such use.

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The University Medical College of Kansas City, Mo., has closed its doors after various attempts to consolidate with the university of Missouri and with William Jewell College of Liberty. The Trustees announce that the reason they have quit the field is because of the progress made in medicine the past few years, which requires the service of too many high salaried teachers and necessitates a large sum to equip and maintain laboratories. They believe that a medical college must have an endowment to exist under the present and future standard of medical education.

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The loss of life from tetanus following 4th of July injuries in 1909 was 150 as against 67 in 1911. This one little statement should be the "clincher" in an argument for a sane 4th. The Journal of the American Medical Association deserves the lions share of the credit for bringing about this result, which in all probability will in the future be nation-wide. There is certainly no excuse for a celebration which, entails so much disaster as there has been heretofore on Independence Day. We all want to celebrate but there are many other ways of giving vent to joy and enthusiasm, without self destruction.

There is no doubt but that we must, before the next election formulate some definite and concerted plan of action to help further needed medical legislation. Efforts directed along the right lines cannot help but bring results. In the first place we must use our influence not singly but collectively. Secondly we must get an outline of the laws that should be enacted and furnish each candidate for the House of Representatives and the Senate a copy with a request for a direct answer as to how he stands. If his stand does not agree with our ideas then we will know what to do. A Committee should be formed at an early date to take up this work and push it to a successful termination. Missouri has done wonders working along these lines, especially in keeping down legislation of a harmful character. We should do as much. Right will triumph but it takes nerve, energy and tireless workers to see that it does.

One of the paramount questions of this day, which concerns medical men in its prevention and the people at large, in its beneficial results, is the care of the school child. This subject which has been agitated for the past few years, but is still in its infancy, was the subject of our President's address at the last meeting. There is not the slightest doubt but that we have been derelict in our duty for years past, in not taking cognizance of the needs of the school child, and a campaign of education, should be carried on which will bring the school authorities to a proper realization of their duty toward the pupils. The average school board has heretofore been filled with the idea that knowledge and more knowledge should be crowded into all alike without any regard to the ability of the pupil to withstand it. They have not realized that the physical condition of the pupil has ever needed any attention probably concluding that anyone able to be on their feet should be able to keep up with the work of healthy sound children. We all know the result of such teaching. The school authorities are not wholly to blame, because they have not been taught by the medical profession, the conditions that actually exist. There is but one way to proceed and that is medical supervision in conjunction with the intelligent watchful care by the teachers this being brought about by suitable laws, teaching and cooperation with the school boards.

Salvarsan bids fair at this date, to hold a high place in the *materia medica*, which its adherents have claimed it should. This drug as has been the case with others which were heralded as

panaceas, has been given with a reckless disregard of the consequences, and until it is given in a safe and sane way, reports will continue to be made of an adverse nature. A drug so potent as salvarsan must of necessity be given with caution. A thorough knowledge of the technic of its administration, combined with a knowledge of the conditions which prohibits its use, is absolutely essential. Articles by investigators have appeared devoted entirely to the "don't's" in its use. Some of them may be mentioned as myocarditis, advanced stage of tabes dorsalis and general paresis, nerve syphilis, affecting vital centers; cachectic or debilitated persons (unless the condition is due to syphilis), aneurism, optic neuritis, and in persons with lesions (such as gastric ulcer), in whom increased blood pressure may produce hemorrhage.

To sum up, salvarsan should not be given indiscriminately without regard to the proper dosage of each individual case or a proper understanding of all its effects. Deaths have occurred and more will occur from its unskillful administration.

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At the last annual meeting of the society at Kansas City, addresses of welcome and responses were cut out, and the society proceeded to business at the appointed time. While these addresses have always been worth listening to, they have interfered largely with the scientific session and consumed practically one half day of the session. Other societies are following in our footsteps, the Medical Association of the South-west being the second to dispense with the addresses.

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Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry of the Department of Agriculture is again under fire, this time for a technical violation of the law in regard to the pay for expert witnesses in his department. It is the same old story of repeated attacks upon Dr. Wiley, whose honesty, integrity, wisdom and perchance an intense desire to have the law enforced, that has forced his enemies in every conceivable way to effect his removal. But these charges will fail, as they have in the past. When one understands the unbiased way in which Dr. Wiley has enforced the pure food and drug laws and the grief that has come therefrom to manufacturers, who have put upon the market impure and adulterated food and drugs, the animus behind the attack can readily be understood. That Dr. Wiley has been a fearless and tireless worker and that his efforts have been of everlasting benefit to mankind, there can be no question and to remove him from the position he occupies would be a severe blow to the consumer

and a "ten strike" for the interests. We hope no such action is even contemplated.

SOCIETY NOTES.

Medical Society of the Missouri Valley.—The twenty-fourth annual meeting of this society will be held in Omaha, Nebraska, September 7 and 8, 1911, under the presidency of Dr. Donald Macrae of Council Bluffs.

The presidents of the various state societies within our province have been invited to attend and will be the guests of our association upon this occasion.

The Oration in Surgery will be delivered by Dr. Geo. W. Crile, of Cleveland, O., and the Oration in Medicine by Dr. L. Harrison Mettler, of Chicago. The mere mention of these names is sufficient to insure a large attendance on the evening of the first day.

The arrangements are in the hands of a local committee appointed by the Omaha-Douglas County Medical Society, and all members are urged to bring their ladies, as special arrangements are being made for their entertainment.—Medical Herald.

NEWS NOTES

Kansas City, Kansas Commissioners Decide to Put Fake Doctors Out of Business.—The commissioners of Kansas City, Kansas, have decided to put a stop to house to house sale of medicines, even going so far as to include furniture polish in the list. An ordinance requested by the health department has been presented to the commissioners providing that no "doctor" shall go from house to house or offer for sale on the street any patent medicine unless it has been passed upon by the city health department.—Kansas City Times.

Surgical Operations in Midocean.—Surgeon McMaster, of the White Star steamship Celtic, performed two operations for appendicitis on two men passengers while the Celtic was in midocean. He was assisted by Dr. Roberts, of New York, and Dr. Ringer, of Seattle. The ship was slowed down while the surgeons were at work. The patients arrived in England safely.—N. Y. Medical Journal.

Dr. C. M. Stemen had charge of the Kansas City, Kansas, Board of Health during the absence of Dr. F. Campbell, who spent three weeks in Canada.

Case Reports.

Clinical and Histologic Effects of Total Arrest of Circulation for an Hour.—Depage of Brussels was operating on a boy of 15 for osteomyelitis of the femur when the patient's heart stopped beating. Notwithstanding all measures for resuscitation for a whole hour, including massage of the heart, there were no signs of revival, but then a pint of salt solution was infused and under the influence of this, the massage of the heart proved successful and the boy was resuscitated. His mind, however, seemed affected; he was agitated and delirious, but there were no motor disturbances or modification of the reflexes. He remained in this condition for nine days the temperature going up to 40.5 C. (105 F.) and then he died. The university pathologist, R. Sand, examined minutely innumerable sections of the brain and other organs, regarding the case as equivalent to a laboratory experiment on the effects of total arrest of the circulation for an hour, conditions in the brain having been practically the same, he thinks, as when the circulation has been shut off from an organ by a ligature. His report was read at a recent meeting of the Belgian Academie de Medicine. It stated that there "was not a single nerve cell intact in the entire extent of the cerebrospinal axis," and, further, "that the case teaches the value of saline infusion as an adjuvant in chloroform accidents." Sand's conclusions were qualified by the academy, in accepting the report, as being "rather too sweeping"—the patient had not exhibited symptoms which would have been inevitable if every nerve cell had been injured.—Journal A. M. A.

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Two Cases of Extra-Peritoneal Transplantation of Ureters into the Rectum for Extroversion of the Bladder.—Reported by Dr. J. V. Arumugum, Medical Officer in charge Victoria Hospital, Bangalore, Southern India, in the American Journal of Surgery, May, 1911.

On August 20, 1906, in the Victoria Hospital, at Bangalore, Mysore Province, Southern India, a boy, aged 18 years, was operated upon for extroversion of the bladder, and the ureters were transplanted into the rectum, according to the method advised by Mr. Peters, of Jaranto. The patient was discharged from the hospital 58 days after the operation. At the time he left the hospital he was able to retain urine in his rectum for about four hours during the day and for nearly nine hours at night (i. e., during sleeping hours, from 9 p. m. to 6 a. m.)

On April 15, 1907, a boy aged 13 years, had his ureters transplanted into the rectum for extroversion of the bladder, and was discharged from the hospital three months after the operation. This patient was able to retain urine in the rectum for about four hours during the day and for nearly five hours at night at the time of his discharge from the hospital.

I have seen both these patients several times. The second case was seen by me on February 16, 1911, when I found that he was able to retain urine in his rectum for nearly six hours during the day, and was at times disturbed at night only once between 9 p. m. and 6 a. m.

The first case of extroversion of bladder was last seen by me about three months ago, when the patient was able to retain urine in his rectum from five to six hours during the day and for nearly eight hours at night.—Journal Medical Society of New Jersey.

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Carbuncle.—C. L. McDonald, Cleveland, (Journal A. M. A., July 1) reports the care of a diabetic patient, aged 48, who suffered from a large carbuncle in the back of his neck. Cultures showed the staphylococcus aureus. An autogenous vaccine was prepared and the patient inoculated with one hundred million dead cocci. For two days there was slight increase in discharge and soreness at the site of inoculation. By the end of the week, however, the discharge had decreased about 75 per cent and the soreness and induration had greatly diminished. A second inoculation of two hundred million dead cocci was followed by almost complete arrest of the discharge, induration and pain. A third inoculation of two hundred million dead cocci on the fourteenth day was followed by continued improvement and on the the twenty-third day the neck was entirely healed. Since then he has faithfully come for inoculation every six weeks and is free from carbuncles or boils, though the diabetes follows its usual course. The article is illustrated.

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MISCELLANEOUS

For Sale. Yale operating chair, in good condition, address, Dr. A. H. Connett, Great Bend, Kansas.

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The First Caesarean Section in The United States.—Otto Juettner, of Cincinnati, that indefatigable medical historian, after diligent search for many years, has succeeded in finding a picture

and the facts of the life of John S. Richmond, of Newtown, a suburb of Cincinnati, who did the first Cæsarean section in this country. It was on the evening of April 22, 1827. The operation was done with the light of one candle which constantly threatened to go out. The woman lived, but the child died. He afterwards was a hero in the cholera epidemic of 1832. He subsequently moved to Indiana, where he died and was buried. The office where he practiced is still standing, in Newtown, and a movement is on foot by the Western Association for the Preservation of Medical Records to place a tablet there. Dr. Richmond's granddaughter, Mrs. Julia I. Levering, a very old lady, is still living in Long Island.—Ohio State Medical Journal.

The various slang words applied to the insane apparently have their roots deep in the language. Batty seems to refer to the aimless wandering of the insane, like the supposedly purposeless flight of the bat; bughouse derives from the Welsh bug and the Gælic bocan, an evil spirit, to the supposed presence of which insanity was long attributed. Daffy or daft is very old English for one addicted to childish trifling. Dippy may or may not be an allusion to hydrocephalus, or water on the brain, from the Saxon dippan, to plunge into water. Nutty is quite possibly allied to the Latin nutans, a wagging of the head. Crank or cranky was primarily applied to the wayward movement of an unballasted ship; in old English a crank was an invalid. Compare the German krank. These are all excellently descriptive words, even if not sufficiently dignified for psychiatrists. The more respectable crazy comes from the French ecraser, to crush.—N. Y. Medical Journal.

Communications.

Salina, Kansas, July 20, 1911.

Dear Doctor:

The Golden Belt Medical Society wishes to call your attention to the following resolutions adopted at its meeting in Junction City, July 6th, 1911:

"Whereas, The members of the Golden Belt Medical Society here assembled in view of the fact that Mr. Arthur Capper, Editor of The Topeka Daily Capital, has announced his intention of being a candidate for Republican Nominee for Governor at the fall primaries, and that in his platform he makes special mention that he is against graft, therefore, be it

Resolved, that we announce our lack of confidence in his anti-graft declarations when he persistently lends his column for advertising purposes to what the medical profession considers to be such a colossal graft as Carson and his Temple of Health. Be it further

Resolved, that we request all physicians of good standing to use all honorable means to inform the public that the medical profession considers Mr. Arthur Capper, by accepting such advertising, as being in accord with and promoting this form of questionable practice and who would consider personal gain preferable to the honest consideration of general public welfare."

L. O. NORDSTROM, Secretary.

CLINICAL NOTES

Eversion of the foot, shortening of the extremity, elevation of the trochanter, spell fracture of the neck of the femur. Manipulation is unnecessary to the diagnosis.—American Journal Surgery.

Hyperhidrosis of the feet may sometimes be promptly relieved by soaking the feet for fifteen to twenty minutes in a warm saturated solution of sodium bicarbonate for three or four evenings in succession.—Journal of the Indiana Medical Association.

The gonococcus will live for a long time in the glands of Skene, Bartholin's glands, the glands of the cervical endometrium and the Fallopian tubes. They remain alive only a short time in the vagina and the uterine cavity.—Inter. Jour. of Surgery.

Cancer of the stomach should be as curable as cancer of the breast, but unfortunately it is usually neglected until a period when cure is out of the question. It has been our habit in the past to wait too long for a diagnosis. It is conceded that when cancer of the stomach can be positively diagnosticated, it is too late to expect a cure by operation; therefore we are brought to the position that cancer of the stomach should be prevented—in other words, we should operate in the precancerous stage, namely, during the period of precancerous ulcer.—Parker Syms, in the New York Medical Journal.

Next to malignancy, probably the darkest chapter in surgery is that of intestinal obstruction, the mortality being variously

estimated at from 65 to 85 per cent. A small part of this exceedingly high rate is legitimate; the greater part of it, however, represents the mortality of delay. The relief of pain with morphia, and the ineffectual administration of purgatives, does not constitute conservative, but, on the contrary, reckless treatment.—Irvin Abell.

The Antihemolytic Action of Arsenic.—Gunn and Feltham in the British Medical Journal of January 2, 1911, report a research upon this subject. The conclusions drawn from these experiments are that arsenic, whether in the form of sodium arsenite or sodium arsenate, exerts on the red blood-corpuscles an action antagonistic to that of certain hemolytic agents. The experiments, therefore, afford additional proof in favor of the view that a protective action on the formed red blood-corpuscle against normal or abnormal hemolytic processes may, in part at least, account for the as yet imperfectly explained benefit which results from the medicinal administration of arsenic in blood diseases.—Therapeutic Gazette.

Tincture of Iodine in the Treatment of Erysipelas.—The author reports a series of about 40 cases treated locally with iodine tincture. He considers it superior to other agents, but specifies certain points in the technique which are essential to success. The zone of sound skin surrounding the involved area is first painted with a wad of sterile cotton dipped in the tincture; next the diseased area is painted, using a fresh wad, finally, the area is covered over with cotton, to prevent spreading of the infection through the intermediary of the patient's fingers. The author found it best to apply the iodine lightly five or six times a day rather than more freely morning and evening. In this way induration of the superficial skin layers, which would interfere with the action of the iodine, is avoided.

The tincture used should be of 10 to 12 per cent strength, and freshly prepared.

Twenty-one cases of facial erysipelas were thus treated with uniform success, 1 recovering after the first application, 16 in three days, 3 in four days, and 1 in five days. Of 6 cases of erysipelas of the neck, 2 were relieved in four days and 4 in six days. Eleven cases of erysipelas complicating accidental wounds yielded in less than five days. The wounds were left unsutured and treated likewise with iodine, with good results.—Ferrari, in *The Gazzetta degli Ospedali e delle Cliniche*.

Disinfection of the Skin.—Tinker and Prince, of Ithaca, report in *Surgery, Gynecology and Obstetrics* for June a series of experiments with various so called antiseptics to determine their bactericidal power when used on the skin. They have little faith in tincture of iodine, recently so highly praised, especially by British writers, but they think it has possibly an action in increasing the flow of blood to the region of operation with a corresponding increase in the number of leucocytes; it will not destroy the spore forming bacteria. They prefer for general use in preparing the patient Harrington's solution which they apply with friction for about two and a half minutes, sponging off with alcohol. Harrington's solution may be prepared by dissolving fifteen grains of corrosive sublimate in two and a half ounces of chemically pure hydrochloric acid, and then adding twelve ounces, six drachms of water, and twenty-seven ounces of alcohol. As the solution is irritating to the hands, if often used, the authors rely for their personal preparation on the old fashioned scrub with soap and water, immersion in mercury bichloride solution, and a final cleansing in alcohol.—*N. Y. Medical Journal*.

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Angina Pectoris.—Sir James Barr, in the *Medical Counsel*, points out the indication and use of calcium in the treatment of angina pectoris as follows: In true angina of the spasmodic type there is an excess of lime in the heart muscle and also to some extent in the blood. He cites a case recently in consultation, in a woman who had suffered severely for six months and at the time of consultation was having at least a dozen attacks each 24 hours. All the usual remedies had been tried with little relief, and the prognosis was considered very grave. The patient was 66 years old, and a thick-set, well-nourished woman, with a pale face and anxious expression; she had an intense feeling of oppression in the cardiac region; the heart area was large and remarkably tender. The heart action was regular except for an occasional intermission; the sounds were clear except for a long rough systolic murmur over the aorta and a low pitched systolic murmur in the mitral and tricuspid areas; examination showed the calcium of the blood only slightly above Bell's unit. The treatment consisted of half a dram of dilute phosphoric acid every three hours, and plenty of acid fruits. The local hard water was interdicted. Small doses of morphin and atropin, also nitroglycerin, were continued as palliatives while pain continued. The pain rapidly disappeared. The patient was kept in bed for a month, then the acid was replaced by strychnin and strophanthus. Recovery was complete.—*Medical Standard*.

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No. 9

VACCINES AND VACCINE THERAPY.

With Report of Cases.

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worth, Kansas.

PHILIP B. MATZ, M. D., Assistant Surgeon, National Military
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Read before the Kansas Medical Society, May 5, 1911.

Part One.

We have the honor to present for your discussion the subject of bacterial vaccines, taking it up from both a theoretical and clinical standpoint. It is a known fact, and has been for years, that following an attack of certain acute infectious diseases, there remains a lack of susceptibility to reinfection, the individual becoming immune. The various theories of immunity will be discussed presently.

As early as the year 1796, Jenner took immunity as a basis and perfected vaccination against small-pox. In the middle of the 19th century, it was demonstrated that micro-organisms, known as bacteria, were the cause of various acute infectious diseases, and even at this early date attempts were made to produce immunity by means of injections of killed bacteria.

Pasteur immunized against chicken cholera, but this was found to be impracticable. Haffkine succeeded in immunizing against cholera, and was followed later by Pfeiffer and Wright

in successful immunization against typhoid fever. Pasteur was successful in producing active immunization in hydrophobia.

When active immunization is begun during the course of an infection, there is a superimposition of a mild form of the disease upon a severer form, thus accentuating the disease. The foregoing fact is what caused the relatively long period of cessation of this method of treatment. Wright revived active immunization and used the method before he discovered opsonins.

Wright has done a great work by determining the proper dosage for the various vaccines, using the opsonic index as a guide. He has suggested certain doses and lays down the principle of giving the smallest dose that will cause a rise in the opsonic index, and never to increase the amount injected until it has been ascertained that the doses which have been injected have been too small to produce a good rise in the index.

In some of our cases we have observed headaches, fever and vomiting, but seldom when doses as recommended by Wright were given. The foregoing symptoms make up the negative phase, which is followed in about twenty-four hours by a marked buoyancy of spirits and stimulation—the positive phase.

It is important to give the injection in the region where absorption is rapid, and the subcutaneous is preferable to the intravenous method. We rely upon the clinical manifestations as our guide to dosage and interspacing of injections, paying no attention to the opsonic index. Hektoen regards the opsonic index as essential, but Park, Cole and Balduan regard it as unreliable for such purposes.

We have, at our command, two kinds of bacterins—autogenous and stock—each of which has its special advantages. The advantage of the stock vaccine over the autogenous is the time element, but the treatment may prove a failure, owing to the fact that all of the offending organisms may not be present in the vaccine.

When a human being becomes infected by micro-organisms, he is able to resist and overcome the bacterial invasion. There are three theories which attempt to elucidate the way the organisms defend themselves against microbic infection.

The humeral theory, elaborated and championed by Ehrlich, is that the organism produces an immunity as the result of chemical reactions going on between the toxins and the cells; in this reaction the cells throw off anti-bodies to combat the toxins.

Metchnikoff's theory, also known as the cellular theory, is based on the phagocytic property of the leukocytes, i. e., that

property of the white cells whereby it is able to digest bacteria

At the present time the theory of opsonins promulgated and taught by Wright and his school is considered the explanation of the biological force at work in immunity. According to this theory, the presence of the bacteria stimulates the tissues to the production of opsonins and other anti-bodies, these act on the micro-organisms in a number of ways, preparing them for the phagocytes.

The opsonins and phagocytes are assisted by nature in that she tries to localize the infection, i. e., instead of allowing the bacteria to multiply and go into the general circulation, she corners the germs and then what happens? A local infection known as an inflammation. There is an increased blood supply to the part, pain, swelling, redness, fever and the production of pus, which, of course, is the result of the fight between the germs and phagocytes.

What is the origin of the anti-bodies which are so valuable in immunity? Are they produced in the blood serum or are they formed by the tissues? Hektoen and Carlson demonstrated recently that the anti-bacterial substances are not elaborated in the blood, but in the tissues; they showed that the circulating blood to which toxins have been added, is rapidly deprived of those toxins, and when transfused into another animal of the same species, sets up no production of anti-bodies in that animal; whereas the original recipient of the toxins, although deprived of its own blood and transfused with that of a third animal, proceeds to develop immune bodies.

To repeat, two elements come into activity in the protection of the organisms against invading bacteria, viz; the phagocytes and the anti-bacterial substances. There a number of ways in which the anti-bodies act on the bacteria and prepare them for the phagocytes.

1. The bacteria may be killed without being dissolved; due to the action of bactericidins.
2. The bacteria may not only be killed but also be dissolved as a result of the action of bacteriolysins.
3. The bacteria may be so changed as to be readily digested by the phagocytes. This is known as the opsonic effect, and is due to the action of the opsonins.

The latter substances are the most important of the immune bodies. The opsonins have been shown to be destroyed by exposure to a temperature of 60 C. for a short time. The opsonic power of the blood gradually disappears on standing, losing about 50% of its activity in five or six days.

The presence of the anti-bacterial substances confers an immunity to a particular disease. This immunity may be a natural or it may be an acquired one. Immunity may result after a pathological condition has existed, as, for instance, after a person has had scarlet fever, he acquires an immunity for that disease.

Certain parts of the body are more rapidly attacked by bacteria than others, and there are some tissues which are very seldom affected by bacteria; i. e., the latter organs or tissues are able to destroy any organisms that try to attack them, such as spleen or the skeletal muscles.

It has been found that if bacteria are inoculated into the circulation, killing within fifteen minutes and making sections of the liver and other organs, the bacteria are actively taken up and destroyed by the endothelial cells lining the capillaries of these organs.

Experimentally acquired immunity is produced by vaccination; it produces a modified and mild form of the disease. The individual in this case produces his own immunity. As a rule, living or killed bacteria toxins produced by bacteria are injected.

In 1903 Wright and Douglas pointed out that there are certain substances in serum that so affect bacteria that they are more easily taken up and disposed of by the leukocytes. ^{This} substance they called opsonin. They decided that the amount present in serum is variable and can be increased by the ^{amount} injection of killed cultures of bacteria. This fact forms the basis of the present day vaccine therapy.

As was said before, Wright and his pupils controlled the dosage by taking the opsonic index. The opsonic index is the ratio of the average number of bacteria per leukocyte when the patient's serum and serum from a healthy individual are added to equal amounts of leukocytes and bacteria. The opsonic index has been found so unreliable and the results obtained are so discordant and inconsistent that it is now practically given up.

Instead, the clinical symptoms of the individual are taken into consideration and the dosage regulated by them. Wright found that in persons with a localized or chronic infection there is a decrease in the opsonin content of the blood. This decreased opsonin content is due to the fact that in local infections but little of the bacterial substances are absorbed, and so gives rise to but a small amount of active immunity. When this is the case the local infection becomes chronic.

Wright has demonstrated that following the injection of vaccine made from cultures of infecting organisms, there is ^{first}

a drop in the opsonic index and later a rise in the same. The drop in the index is known as the negative phase and the rise as the positive phase. Agglutinins, precipitins, and bacteriolysins, after the injection of killed bacteria, are also at first decreased and later increased in amount. In the human the negative phase lasts about twenty-four to forty-eight hours; this is followed by the positive phase which lasts from three or four days to two weeks; average, about ten days.

In vaccine therapy the object is to regulate the injections of killed cultures, so as to get as small a negative phase and as long a positive phase as is possible.

Action of Vaccines.—As was said before, in infections the body absorbs certain substances from the infected area which stimulates the organisms to the production of opsonins and other anti-bacterial bodies, and if a sufficient amount of these anti-bodies are present, the infection is combated and brought to a stand-still; if not, the infection goes on and becomes chronic. This infected area is then walled off from the circulation, a running sinus is formed and it may keep on discharging for a long time.

Now by injecting killed cultures of the causal organisms into the body, the anti-bacterial substances are increased in amount, circulation around the site of infection is improved and the infecting germs killed off.

Adami says, "The fact that once bacteria have established themselves within a given tissue and have undergone proliferation there, that in itself is a sign that that particular tissue is not immune; that the subsequent arrest of their growth is not due to an exaltation of the bactericidal powers of the local tissues, but is due to aid contributed by the organism from without."

Dosage.—It seems rather strange that it is necessary to regulate the dosage of the dead organisms to be injected, but nevertheless it is so, and one must be careful not to inject too large a dose of a virulent bacterium, as, for instance, the streptococcus or the tubercle bacillus; one must also be very cautious in administering new tuberculin, one of the reasons for lack of success in tuberculin treatment being that the doses are entirely too large and instead of stimulating, marked toxæmic conditions are produced.

After the injection of the vaccine, constitutional symptoms may arise, such as nausea, vomiting, rise of temperature, etc. The symptoms may be more marked in some individuals than in others and may be severer after a second injection than after the initial injection.

This may be due to the patient's hyper-susceptibility resulting in a condition of anaphylaxis. The physician must watch the patient closely after the second injection and look for any symptoms or signs of an over-dose.

Preparation of Vaccine. The method of making the bacterial vaccine that I am about to describe is the technique used at the National Military Home Hospital and is one for making autogenous or personal vaccines.

First, it is essential to isolate the causal organism or organisms, if the infection is mixed; knowing the etiological bacteria, one must know the best culture medium for that particular germ. For instance: the gonococcus will not grow on agar alone, but will develop on blood agar or hydrocele fluid; the tubercle bacillus will grow best in broth culture; the typhoid bacillus will develop very well on ordinary agar.

So that the causal organism is isolated and grown on a culture medium for twenty-four to forty-eight hours at a temperature of 37° C., which is the temperature best suited for bacterial growth.

After obtaining a good growth, the colonies are washed down with a small quantity of normal saline solution into a sterile test tube. Here the clumps are broken up so that an emulsion is obtained which is uniform in opacity.

After the bacterial emulsion is obtained it is necessary to count the number of organisms in 1 c. c. of the emulsion in order to standardize the vaccine. This is quite laborious and requires some skill.

To do that, you draw into a capillary pipette one volume of the bacterial emulsion and an equal amount of fresh blood obtained from a puncture in the finger. The volumes are mixed thoroughly and a drop of the mixture placed on a clean slide; with another slide the drop is spread out so that one gets a thin smear. This is allowed to dry and fixed with methyl alcohol and then stained with either Loeffler's methylene blue or Wright's stain. The slide is then counted by determining the number of red blood cells and bacteria in from ten to twenty-five fields of the high power of the microscope.

Now normal blood contains five million red blood cells to the cubic m. m., after having established the ratio of red cells to bacteria in the suspension, it is easy to determine the number of bacteria per cubic mm.

Let R B C equal number of red blood cells counted.

Let B equal number of bacteria counted.

Let X equal number of bacteria in a cubic mm., the unknown quantity.

Therefore, since there are 5,000,000 red cells in 1 cmm. the equation would read as follows:

5,000,000 : x ; ; R B C ; B.

X equal number of bacteria in a cubic mm.

1000 x equal number of bacteria in a c. c.

The tube containing the bacterial suspension is now sealed and heated in a water bath to a temperature of 60° to 65° C. for an hour. This destroys the virulency of the bacteria but does not effect their opsonizing property.

The bacteria being killed, a dilution suitable for injection is made in a bottle containing 30 to 60 c. c. of normal saline solution, enough carbolic acid or lysol being added for preservative purposes to make a 0.5 % solution.

If, on testing the vaccine for sterility on suitable culture media, the growth is found to be negative, the vaccine is ready for use; in using it, the proper aseptic precautions are to be looked after. Everything must be sterile. It is wise to give the injections every 5 or 7 days, but of course, the condition of the patient must be taken into consideration and the reactions must be watched very closely.

PART TWO.

Vaccine treatment has been used in most all diseases and conditions produced by bacteria. The results obtained have been most satisfactory, and the method seemed to have attained a recognized place in our armamentarium of today. We shall attempt to outline to you their uses in the various infections, illustrating the point in question by means of cases treated.

Staphylococcus Infections.—These infections include carbuncles, boils, sycosis, acne, felons, styes and septic wounds, and have proved most satisfactory for treatment with vaccines. In these the autogenous vaccines are not always necessary, as good results have attended the use of stock vaccines. It is important, however, to determine the species and variety of the infecting organisms.

Many cases suffering from carbuncles and boils show great improvement within twenty-four hours after injection, and we have frequently seen a severe infection become very mild with a cure following the second injection. In all cases we have found the best results when a free incision has been made in a carbuncle or in each of several furuncles. The skin in the region of the infection is kept clean by means of benzine, which, in addition to its antiseptic properties, is of great value as a cleansing agent.

The following obstinate cases of furunculosis will illustrate the results of vaccine treatment:

Case 1.—Furunculosis; has had boils for some weeks, especially on the right arm, hindering him from work; examination of urine showed no sugar, excluding diabetes; October 17, autogenous vaccine was made from agar culture which showed staphylococcus albus; three hundred million bacteria were injected every five days. Following the first injection, there was a free discharge of pus and after the second injection, the boils began to show signs of healing. After the third injection, the patient was cured.

Cases 2, 3 and 4, illustrate the use of both stock and autogenous vaccines in carbuncles.

Case 2.—Carbuncle; infection had existed a week or ten days, and there was a great deal of pain and swelling. Free crucial incision was made, and 250,000,000 staphylo bacterins were injected. The fourth day afterward the wound showed marked improvement, at which time 500,000,000 were injected and a rapid recovery followed.

Case 3.—Carbuncle; began October 28, 1910; free crucial incision was made and 250,000,000 staphylo bacterins were injected; no negative phase except a free discharge of pus; five days afterward 500,000,000 staphylo bacterins were injected, following which there were signs of separation of the slough, with free discharge of pus; 1,000,000,000 staphylo bacterins were injected on the tenth day of the infection, following which there was a rapid recovery.

Case 4.—Carbuncle; came into the hospital with a large carbuncle on the back of the neck; temp. 101; pulse 72; respiration 22; carbuncle seemed to be extending rapidly. An autogenous vaccine was prepared and injected with most marvelous results. The threatened extension was prevented and granulations sprang up with great rapidity, the patient making a good recovery.

The following (case 5) shows a striking result in the case of osteomyelitis of long standing:

Case 5.—Osteomyelitis of sternum; patient was thrown from a horse in 1906, injuring his sternum, osteomyelitis followed; bone had been curretted but four sinuses persisted and continued to discharge; an autogenous vaccine was prepared for the patient; the discharge stopped after four injections, the sinuses closed and have remained so for a year.

Streptococcus Infections.—These infections are of a very severe type and a course either toward death or spontaneus

recovery is rapid. It is a question therefore, as to whether the production of anti-bodies as a result of a vaccine, will have been great enough to overcome the infection before nature herself can come to the rescue.

We wish to report the following case of erysipelas:

Case 6.—Erysipelas; patient had a severe chill, followed by a high fever; then zones of inflammation and œdema over both eyelids, which coalesced; soon after the inflammatory areas suppurated and a thin purulent discharge followed, examination of this showed the etiological germ to be the streptococcus of Fehleisen. A few days after admission to the hospital a small red area was noticed on the back of his right hand, which soon broke down and discharged. Patient was very old and feeble and a vaccine was thought very necessary to assist in combating the infection; a few injections of an autogenous vaccine were given and in about two weeks he began to show signs of improvement, which has been steady up-to-date.

The use of streptococcus vaccine as a prophylactic measure in scarlet fever was introduced by Gabritschewsky and other Russian investigators, the vaccines employed being a concentrated bouillion culture of streptococci, isolated from cases of scarlet fever. The vaccines are prepared and standardized after a method recommended by Gabritschewsky. There is a slight reaction following its use. Over fifty thousand vaccinations have been made and the reports have been very favorable; after three inoculations there is established a complete immunity against scarlet fever.

The following case of tuberculosis had a very severe cough, which proved to be due to a mixed infection, in which the streptococcus was thought to play the most important part.

Case 7.—Tuberculosis; with mixed infection; admitted to the hospital with a severe cough and pain in the chest; sputum showed tubercle bacilli, streptococci and staphylococci; cough very troublesome, dry and hacking, mostly at night. An autogenous vaccine was made and the result of a few injections was very satisfactory; the night cough ceased, though he coughed some during the day. Temperature at the time of injection was 98.2; pulse 66; respiration 24. The following day the temperature was 100; pulse 70; respiration 38; the negative phase. This man experienced a great deal of relief and his cough was undoubtedly due to the streptococcus, principally.

Infections Due to Pneumococcus.—The following cases showed remarkable improvement after the use of pneumo-bacterin and

helps to convince us that the use of it is especially advantageous in the aged where the power of anti-body formation is below par; also in cases of delayed resolution. It is also to be borne in mind that the pneumococcus may not be the only cause of pneumonia and an examination of the sputum should always be made. Undoubtedly the use of vaccine will lower the death rate in pneumonia, especially in persons of low vitality.

Case 8.—Lobar pneumonia; patient had a severe chill, general aching over the body, pain in left chest, but no cough. Examination showed temperature 103; pulse 100, respiration 30; bronchial breathing, rales and dullness in left chest; general medical treatment was continued eight or nine days, during which time venesection was done twice for the relief of the right heart, with beneficial results. There seemed to be no prospect of resolution and it was decided to try the pneumo vaccine; four doses were given at four hour intervals, consisting of 50,000,000; 100,000,000; 200,000,000 and 400,000,000; there was a marked improvement in her condition, manifested by a fall in the persistent high temperature and lowering in the pulse rate with an increase of quality. Expectoration became easier and the case made an uninterrupted recovery.

Case 9.—Pneumococcus infection; patient had a very severe cough which became worse from day to day. Examination of the sputum showed numerous pneumococci, no tubercle bacilli; no signs of pneumonia.

He was given a stock pneumo bacterin. Cough subsided in a few days, the patient stated that he felt much better. He received no other than tonic treatment and was discharged in a few days, cured.

Gonococcus Infection.—The results obtained by the use of vaccines in acute gonococcus infections have not been satisfactory, but in chronic cases they have been more encouraging. Good results have been reported in the treatment of gonorrheal arthritis, but it has not been our good fortune to observe them although we have had several cases under observation. In gonorrheal epididymitis, the results have been quite satisfactory and the following case in which the infection had existed for some time will illustrate its use in such cases.

Case 11.—Gonorrheal epididymitis; the infection had existed for some time, no attention being paid to it; attack had been brought on by an unusual amount of exercise. The usual medicinal treatment was followed, supplemented by the injection of 50,000,000 Neiser bacterins, which was followed by a mild negative phase;

four days afterward, 100,000,000 Neiser bacterins were injected, followed the next day by great improvement. There was an increase in discharge with a marked diminution of swelling and reduction of pain. The symptoms cleared up promptly in the course of a few days.

In chronic gonorrhœa, the infection is nearly always a mixed one and we believe that, in such cases, the autogenous vaccine is absolutely indicated. These cases should always receive local treatment also, because drainage is an important factor in the cure. The cases reported here are of long duration and have been subjected to treatment at the hands of various physicians without results.

Case 12.—Prostatitis; chronic gonorrhœa of twelve years standing. Examination showed an enlarged, tender prostate and examination of the pus showed a mixed infection. The treatment was as follows: Massage of the prostate; deep instillations of silver nitrate solution at intervals; hand injection of zinc sulphate once daily; an autogenous vaccine was made which was injected every fourth or fifth day. Very little improvement was noticed for the first three weeks, then a steady improvement began; prostate diminished in size; the fluid obtained on massage became clearer and much less in amount and the patient stated that he began to feel better. The duration of this treatment was about two months and at the present time we are unable to demonstrate the gonococcus.

Case 13.—Prostatitis; chronic gonorrhœa; patient has had gonorrhœa for seven or eight years and has had all kinds of treatment, such as massage of the prostate, dilatation, deep instillations of silver and stock vaccines. An autogenous vaccine was made, the injection of which was made every fifth day, supplemented by massage and deep instillations of silver nitrate solution at intervals; there was a marked negative phase following the first injection and the patient thought he had la grippe, as the symptoms were nearly identical. The injections were continued at regular intervals with the reaction, or negative phase, becoming less marked with each succeeding injection. The discharge has ceased, the prostate has returned to its normal size; no gonococci are present in the fluid obtained on massage. Duration of treatment, two months.

The differential diagnosis of a simple arthritis from a specific arthritis can be made by the injection of gonococcus vaccine. If the case is one of specific arthritis, there will be a marked increase of swelling and pain in the joint, while, if it is a simple arthritis, there will be no change in the condition.

Bacillus Coli Communis Infection.—The vaccine method of treatment has been most successful in cases of chronic cystitis when due to the bacillus coli communis, although it has been used with varying results in appendiceal abscesses, cholecystitis, and various local infections produced by this organism. The following case, an infection following an operation for an inguinal hernia in which the principal cause was thought to be the bacillus coli communis, yielded nicely to treatment with an autogenous vaccine.

Case 14.—Operation wound infected with colon bacillus. Examination of the pus from the wound showed the above infection. An autogenous vaccine was made, the first injection of which was followed by a slight negative phase; the pus became thinner in character and the swelling of the edges of the wound decreased rapidly. After the second and third injections there were no negative phases and the infection seemed to be limited to the skin and the superficial fascia. After the sixth injection, the case made a complete recovery.

Typhoid Fever.—Prophylactic inoculations against typhoid fever have been used quite extensively in the German and English armies and comparatively recently in the United States Army. Statistics are meager as to the results but Wright says that the incidence of typhoid fever was diminished one-half and the mortality from the disease reduced two-thirds. English statistics show that, under similar conditions of exposure, for every case of typhoid fever among the inoculated, there were ten cases among the uninoculated.

The vaccine which has been used in the United States Army has been prepared from a single strain of the bacilli which has been under cultivation for a number of years. This strain has practically lost its virulence for animals.

A fresh vaccine, not over three months old, is generally used, although older vaccines have been used with good results. It is a disputed question as to how long a vaccine will retain its properties, but we believe that, if kept under favorable conditions of light and temperature, they may be kept for a long period of time, especially where a preservative has been added. Experimental work is now being done in the army to determine the keeping qualities of the various vaccines.

In prophylactic inoculations, the initial dose should be 500,000,000 injected into the subcutaneous tissue at the insertion of the deltoid muscle. The usual antiseptic precautions should be observed, one of the most efficient antiseptics being tincture

of iodine. The second should be 1,000,000,000 ten days after the giving of the first dose, and should be followed in another ten days by the same dose. Three doses are sufficient to produce immunity.

Major F. F. Russel, Medical Corps, U. S. A., recommends that the injections be given about four o'clock p. m., for the reason that, should there be a severe reaction, it will come on during the night and be practically over by morning. It is also recommended that the individual refrain from alcohol for some hours before and after the inoculation, as it seems to increase the severity of the reaction.

Something should be said here regarding the severity of the reaction and we cannot do better than give the classification as applied to the army. They class as severe, all reactions with a temperature over 103; as moderate, those between 100 and 103; all temperatures below 100 and above normal are classed as mild; when no temperature is present, the reaction is considered absent unless the patient complains of headache or malaise.

The following table, taken from Major Russel's report, will show the resulting reactions following the inoculations of typhoid vaccine in nearly 1,500 cases:

First Dose.	Second Dose.	Third Dose.
1,887 men.	1,769 men.	1,450 men.
Absent..... 59%	69.7%	78.27%
Mild..... 6.15%	5.2%	.19%
Moderate..... 6.15%	5.2%	2.4 %
Severe 9%	.9%	.2%

In children the reaction may be said to be absent.

The Widal reaction is positive in high dilutions, being evident sometimes, after vaccination, in those of 1 to 10,000 or even higher. It is said to reach its maximum after the third injection. The leukocyte count is temporarily increased after each dose of vaccine, but returns to normal in about ten days. In our opinion, the prophylactic use of typhoid vaccine should be encouraged, especially among the members of a family in which there are already existing cases.

As to the use of vaccines in the treatment of typhoid, we will quote from a recent paper by Prof. J. M. Anders, who concluded regarding their values as follows:

- (1) As a means of prophylaxis.
- (2) In suitable cases, when continued during convalescence, to prevent relapses.
- (3) To combat local infections with the typhoid bacilli,

as, for example, bone suppurations which arise in the period of convalescence.

(4) For the removal of typhoid bacilli from the urine and feces in the case of carriers.

His last conclusion seems to be the only logical way of getting rid of our typhoid carriers and the method has been attended with some flattering results.

The subject of tuberculin therapy has been so extensively discussed and written upon that it has been purposely omitted from this paper.

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**COMPLETE ATRESIA OF THE VAGINA WITH REPORT OF A
CASE COMPLICATED BY HEMATOTRACHELOS, RUDI-
MENTARY UTERUS.—OPERATION.**

DR. RICHARD S. HARVEY, Newton, Kansas.

Read before the Kansas Medical Society, May 5, 1911.

History Taken 2-13-1909.

Case.—M. T., a Hopi Indian girl, sixteen years old, attending school and doing housework. Father and mother living, both well. Has three sisters and two brothers, all well. Three sisters died in infancy; cause of death unknown. Had chicken-pox in childhood. Never affected with any serious illness until present trouble began.

Patient has never menstruated. Enjoyed good health until one year ago, when present illness began with paroxysms of pain felt in pelvic and lower abdominal region, accompanied by dizziness and nervousness to the extent of muscular twitching of face and hands. These attacks occurring sometimes every four weeks and sometimes only once in two to four months, but never with the appearance of any menstrual flow. Patient constipated much of the time, subject to severe headaches and dysuria, especially during the period of paroxysms.

Condition at time of examination at Bethel Hospital, Newton, Kansas.

A well nourished, and to all appearances, a well developed girl, but nervous and timid. Pulse 92, temperature 99. Heart and lungs negative. Urinalysis and blood findings negative, abdomen slightly distended, with general tenderness, more pronounced in supra-pubic and ovarian regions. An abnormal area of dullness on percussion in flanks and supra-pubic regions. No definitely outlined mass could be palpated under anæsthesia.

It was found that there was a slight depression of the vulvar orifice, one fourth inch in diameter, and about that deep, with absence of the labia minora and clitoris; the urethral orifice situated in the upper part of this depression.

With a sound passed into the bladder, a rectal examination was made and a large soft globular and movable mass felt through the anterior rectal wall. At the normal site for the vagina a distinct fibrous cord could be felt.

Diagnosis.—Congenital complete vaginal atresia and probable hematometra. Operation, April 29, 1909.

An attempt to gain access to the mass through the perineal route by dissecting between the bladder and rectum was abandoned for the following reasons:

1. The space between bladder and rectum was practically nil.
2. It was impossible to determine, upon examination, with any degree of certainty, the absence of a hematosalpinx.
3. Having seen two unsuccessful operations for artificial vagina in similar cases performed by recognized gynecologists.
4. Believing strongly in the possibility of a rudimentary uterus on account of other genital defects, I proceeded to do a laparotomy. The usual median incision was made. The globular mass felt through the rectum was the hematotrachelos, and when filled with fluid, was six times the ordinary size, and continuous with the body of the uterus, spreading out quite symmetrically, was the large thick walled cyst filling the lower part of the abdomen and pelvis. One thousand c. c. of dark thick blood was removed from the cyst. This was separated from the post bladder wall and from the rectum after tedious dissection on account of the firm adhesions at these sites. The body of the uterus with cyst was removed. The abdomen was closed and the patient made an uneventful recovery except for slight breaking down and suppuration of the abdominal wall at the lower angle of the wound. A recent report states that the patient has gone back to camp-life and is enjoying good health. On account of the presence of defects in other genitals, and the absence of any etiological factor, this in all probability is a case of congenital atresia of the vagina.

The comparative scarcity of these cases amply justifies the report of all individual cases. The difference of opinion in regard to its etiology calls for a careful record of the findings in each case.

Nagel, Veit and Meyer take the view that all simple atresias, i. e., when there is no co-existent defect in other genital organs,

are acquired, and most authorities at the present time concur in this opinion. Such a view as to the etiology would be strengthened in all cases where there is a history of small pox, diphtheria, measles, scarlet fever, etc., as the mode of origin.

Kustner holds that such atresias, when present at birth, are the result of inflammation of traumatism inflicted during intra-uterine life. Another writer, Fromme, advances the theory that anomalies of the uterus and tubes may occur in the fetus as the result of vaginal defect. There seems to be no good evidence to deny the fact that a defect may occur primarily in some one part of the Mullerian ducts as well as in their entire length.

Smith and Waterman have collected records of thirty-seven cases whose reports were sufficiently detailed to warrant analysis in this regard, and from the history all of these cases were congenital. In seventeen of these thirty-seven cases, there was complete or almost complete atresia. (Almost complete in that there was a slight depression at the vulvar orifice of the vagina,) of which eight had normal uteri, and nine defective uteri, twenty cases showed partial atresia in the form of complete occlusion of the above or below a certain level, or of an occluding transverse septum of varying thickness, situated at any level of the canal from cervix to the vulvar outlet. In seven of these cases the obstruction was in the lower part of the tract and in six cases in the upper, and in seven the atresia was called hymeneal, but in four of these latter cases the record of the findings was too indefinite to warrant acceptance of the term. In the atresias, higher in the canal there was a defective uterus in five cases and normal in one, in the atresias lower in the tract the uterus was defective in one case and normal in six; and in the hymeneal forms, defective in three and normal in four; thus altogether in nine cases the uterus was defective and in twenty, normal. In the complete atresias the uterus was absent in five cases, rudimentary in two, and bi-horned in two; in the partial atresias of the upper part of the tract, the uterus was absent in three cases, rudimentary in one, one-horned in one; in lower atresias uterus absent in one case and normal in all the others, and in atresias recorded as hymeneal it was bi-horned in two and infantile in one case. Absence of both uterus and tubes occurred in five times, being found in three cases of complete atresia and in each of the upper and lower types. In four cases the uterus, tubes and ovaries on both sides were absent, three of these cases presenting complete atresia and one other lower form, while ovary and tube were missing on one side in a case of complete atresia.

Ovarian defect involves developmental disturbances of a separate embryological structure—the Wolffian body, and hence is an infrequent co-incidence; co-existent anomaly in other organs developing from this body is still more infrequent. In one case the kidneys were abnormal, being joined into one body, somewhat in the horse-shoe manner, and in one other case, reported by Dr. Will Mayo, the ovary on one side was lacking, while there was no kidney or ureter on the other side.

Bearing in mind, that we are discussing atresias probably present at birth and certainly not acquired after development of the menstrual function, and using the cases of the present series as the basis of argument, we might draw the following conclusions: Uterine defects occur a little less than one-half of all cases; there is approximately an even chance of the co-existence of uterine defect with any given form of atresia; there seems, therefore, to be no ground for asserting that a certain vaginal malformation is acquired, when it exists alone unassociated with other genital defects, when it would be regarded as primary, if other genital defects were present.

This aspect of the question does not effect the surgeon in any degree, all atresias of early origin, whatever their cause, presenting practically the same problems. Practical conclusions can, however, be drawn from our data. It is seen that the more extreme defects of the upper genital tract occur in the more extensive atresias, of the upper genital tract, that the per cent of grave uterine defect is almost as great in the partial atresias occupying the upper part of the vagina; that in this latter form the per cent of occurrence of uterine defects in general is much greater; and that in atresias of the lower vagina, while serious defects may be found in the other organs, yet their per cent of occurrence is very small, the more common defects being slight in degree.

Other considerations affecting the choice of operative methods are found in the nature of the hematoma arising from obstruction to complete discharge of menstrual fluid. Out of forty-one cases described in detail a hematoma was present in twenty-seven. Hematocolpus was found in fourteen cases, or fifty-two per cent, existing alone in three cases and associated with hematometra in six, and with hematosalpinx in five cases. In nineteen of these forty-one cases, there was, however, no vaginal canal from cervix downward, and in six other cases there was no canal at the upper end of the vagina, thus leaving only sixteen cases in which hematocolpus could possibly develop.

Hematometra occurred in twenty-three of the cases, existing

alone in seven cases, with hematocolpus in ten, and with hematosalpinx in nine cases. The uterus was the seat of hematoma in all but five of the cases in which its structure was normal. In these five cases the atresia was of the hymeneal type so that a large hematocolpus formed, and in one of these cases there was a large hematotrachelos.

Hematosalpinx was found in eleven cases, twenty-seven per cent, being bilateral in six cases and unilateral in five. Hematometra occurs oftener than hematocolpus, and hematosalpinx least often.

In 1895 Neugebauer collected one thousand cases, a surprisingly large number, almost one half of which were definitely acquired, while in three hundred other cases there was an evident history of inflammation or traumatism as etiological factor.

From a large number of the reported cases it is difficult to draw satisfactory conclusions because the details given are very meagre.

The formation of an artificial vagina in cases of vaginal atresia and rudimentary uterus has in rare instances been followed by development of the uterus and normal menstruation, and may therefore possibly result in maternity. The probability of such a result, however, is so slight as to discourage the operation.

In the vaginal operation it is often difficult to find the site of the cervix and external os for the purpose of entering the hematometra by the perineal route. However, it has been recommended to enter the uterine blood-sac at its most prominent point and to make permanent connection between the vaginal canal and the uterine cavity at that point, but this procedure gives rather poor permanent results. This difficulty is obviated by immediate laparotomy, as suggested by Pfanneustiel, Werthheim and others.

CONCLUSIONS.

1. Get a clear conception of the condition of the genital organs by means of a laparotomy incision.
2. Preserve as much as possible the normal functions of the ovaries, tubes, uterus and vagina.
3. In some cases the blood sac can only be drained through the perineum by making the dissection from above, downward.
4. The permanent results of operations for artificial vagina are discouraging in many cases.
5. In cases where an artificial vagina is desirable, the untoward symptoms should be relieved by an initial drainage of the blood-sac and the operation for permanent results of an artificial vagina instituted later.

6. In complete atresia of the vagina with a rudimentary uterus, removal of the uterus without the production of an artificial vagina will give best results.

REFERENCES.

1. Martin, Pathology and Therapy, Diseases of Women.
2. Emmett, Principles and Practice of Gynecology, 1884.
3. "Dofferlein and Kronig," Operative Gynecology.
4. Veit, Berliner Klin. Woch. No. 16, 1896.
5. Dudley, Gynecology.
6. Webster, American Journal Obstetrics, Volume 32.
7. Neugebauer Monograph, Berlin, 1895.
8. Nagel, Veits Handbooks of Gynecology, 1897.
9. Winters, Gynecological Diagnosis.
10. Veit, Berliner Klin. Woch. 1896.
11. Pfannenstiel Beitrage Gebuztsh, Gynecology.

A REPORT OF 135 CASES OF OBSTETRICS IN COUNTRY PRACTICE.

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Obstetrical statistics are lacking in the uniformity exhibited in other branches of medicine because of the different sources and localities from which they are drawn. The social and physical status of the class from which clinical material is obtained materially influencing statistical findings.

Thus, there is found a wide variation in statistics gathered from practice among healthy rural patients and those compiled from the records of maternity hospitals in large cities. Unfortunately, the practitioner whose field of labor is among country people rarely has the time or inclination to carefully record the result of his observations, and rarely contributes anything of a statistical nature. This fact is regrettable as much valuable data is lost on this account.

The following report of 135 serial cases exhibits some striking variations from the ordinary:

Total number of cases 135, of which 70 were multipara, and 65 primipara. The preponderance of primiparous cases was due to the fact that my practice for the first two years was almost entirely confined to new families; those who had resided here for a period of time and had been confined by other physicians rarely showed a disposition to change.

There were 20 cases of dystocia, 12 in multipara and 8 in primipara. In the multiparous cases dystocia was due to uterine inertia, 2 cases; multiple birth with malpresentation, 3 cases; extension of head interfering with proper rotation, 2 cases; occipito posterior presentation, 1 case; transverse position of child requiring version, 2 cases; flat pelvis, 2 cases.

The 8 cases of dystocia among primiparas were due to parietal bone presentation, 1 case; small mother with large child, 2 cases; rigid perineum, 1 case; inefficient expulsive pains with exhaustion of the mother, 3 cases; uræmic convulsions, 1 case. There were two cases of high forceps in multipara, and two in primipara. The number of male births among the 70 multipara were 35 and among the 65 primipara, 40.

There was one case of mild anti-partum hemorrhage in a multipara. There were two cases of mild and one severe post-partum hemorrhage in multipara. There was one case of puerperal infection derived from a suppurating ear.

Placenta previa was not encountered though suspected in the case of anti-partum hemorrhage. In case 18, there was apparently complete premature separation of the placenta which had dropped down over the internal os. The woman was almost completely exsanguinated on my arrival, although there was no external bleeding. The uterus was enormously distended; the os permitting the introduction of one finger. In exploring the cervix, the placenta was displaced and a terrific discharge of fluid and clotted blood occurred. Efforts at rapid manual dilatation and an attempt at version were fruitless, the hemorrhage proving lethal in 20 minutes.

Case 26 had an adherent placenta requiring manual delivery.

There were two cases of mastitis among the multipara which yielded to compression and the ice-bag, and three in primipara, two of which required incision and drainage.

There was one case of puerperal convulsions in a primipara, mother and child both survived.

The youngest multipara was 19, and the oldest 43.

The youngest primipara was 15 and the oldest 40.

The average age of multipara was 26.1 and of primipara 23.2.

The longest labor in multipara was 21 hours and shortest 3 hours.

In primipara the longest labor was 40 hours and the shortest $2\frac{1}{2}$ hours.

The average length of labor in multipara was 8 hours and in primipara, 14.3 hours from the beginning of pains.

Perineal laceration not involving the sphincter but requiring suture occurred in 7 multipara and in 14 primipara, all were immediately repaired with good results.

Flat pelvis occurred in two cases, both middle aged multipara of foreign birth. Both had premature rupture of the membrane with relapse of the cord. Baxton Hicks version was done in one,

while in the other reposition of the cord and delivery by high forceps was accomplished. Both children survived. In only two cases were anomalous conditions of placenta noted, both in multipara, one calcareous and one fibrotic, apparently due to interference with the blood supply of a small area. There was an anomalous condition of the cord in two cases. In one the cord was unusually thick and only 12 inches in length; in another, some peculiar knots, one of which is exhibited, were present.

There was one case of pely hydramnion in a multipara, in which distention, pain and dyspnœa were present during the last two months of pregnancy. Labor occurred about two weeks before term. As near as could be measured about $1\frac{1}{2}$ gallons of fluid was discharged. In this case there was some atony of the uterus after delivery, due, perhaps to the extreme distention. There was no active post partum hemorrhage, though oozing was profuse for two days.

There was one case in which there was a periodic discharge of amniotic fluid for four months before her confinement.

Two cases exhibited a condition of post puerperal tachycardia, a phenomena, I have been unable to find mentioned in the literature at my command. In both cases rapidity of the heart was noted during second stage of labor, and continued for five days in one case, and for nine in the other. There was no rise of temperature or evidence of infection, and the discharge of blood was no more than usual. The pulse ranged from 120 to 130 and there were no subjective symptoms of discomfort. The disturbance subsided suddenly in each case.

The maternal mortality was one, from hemorrhage following a detached placenta. The foetal mortality in which delivery was the cause was 3, one from traumatism by forceps, one died in convulsions 15 hours after delivery. This was a parietal bone presentation with strong pains and a 20 hour labor, probably from cerebral hemorrhage. One baby, a large healthy male, died three hours after birth. The labor was short, easy and apparently normal. There were no convulsions or cyanosis. The mothers' health prior to labor had been good. I have never to been able account for this death.

The time that patients were confined to bed after labor has varied from four to ten days.

In the past year, in the face of a most strenuous prejudice I have shortened the bed period of robust, healthy mothers to four and five days in conformity with the now current practice in German and Austrian clinics, and I must say I am distinctly pleased

with the results. This change is of course, considered something of an innovation, and in the presence of present popular prejudice requires some moral courage to enforce, as any accident or illness occurring at any time after the puerperium is concluded, is apt to be attributed to "getting up too soon". I am firmly convinced however, that the present custom of keeping the puerperal woman in bed for 9 or 12 or 14 days is based neither on rational grounds of therapy or natural laws, but is purely empiric and the gradual evolution of a custom that would have been dissipated years ago, were it not that the profession fear to face the prejudice of the laity in this respect.

I do not wish to be construed as advocating that every puerperal woman should be permitted to sit up on the fourth or fifth day although this would be just as rational as keeping a robust mother who has experienced a normal labor in bed two weeks in order to impress her that she is receiving skilled care.

Undoubtedly the obstetrical art has degenerated until today it may be said that in most localities it is the least satisfactory and poorest paid branch of our work. Unlicensed mid-wifery, an overcrowded profession, medical commercialism, and human cupidity are the main factors concerned in the degenerative process, supplemented by inadequate training, carelessness, haste and lack of proper care during the puerperium. To take up and thoroughly discuss each of these factors separately would occupy too much time and space, and would be superfluous as well, as every practitioner can readily see where a combination of some of these factors has been responsible for existing conditions in his own community. It is absolutely necessary for the general practitioner to practice obstetrics in order to retain the practice of the family. This necessity has forced many men into the obstetrical field who have neither the predilection, training or judgment necessary for this branch of work, as is evidenced by the records of the gynecologist who is called upon yearly to restore by operation the health of an army of "obstetrical invalids", and perhaps too frankly acknowledges that he lives off the mistakes of the obstetrician.

Obviously the restoration of obstetrics to its proper place of dignity and importance in the profession must be a correction or elimination of the causes provocative of its degradation, and lies within the power of the profession itself.

Midwifery, licensed or unlicensed, is something which we in this particular district are fortunately exempt from but I am told that its practice seriously interferes with obstetrical progress in

other localities, and a great preponderance of puerperal sepsis is due to the unclean and unskilled methods of the midwife. A most rigid examination and license measure should govern their practice in all communities.

The growing tendency toward commercializing the medical profession and to bid and underbid for these cases has done more to cheapen obstetrical practice among the laity than any other factor, and the game of "Follow the leader", (in low prices) has been going on so long that the time is already here when a radical re-adjustment of obstetrical fees is demanded.

It is necessary to give your obstetrical patient a service in skill care and judgment commensurate with the fee you ask and in most cases this fee will be cheerfully paid. Be thoroughly grounded in the physiology of normal labor, then pathological conditions are readily recognized. Let judgment and a knowledge of the indications and contra-indications for interference govern your procedure regardless of the importunities of the patient or her relatives. Asepsis, judgment, patience and courage are ever needful requisites. The man who spends 10 or 15 minutes with brush, soap and antiseptics to prepare his hands, then puts on a gown and pair of rubber gloves and makes his examination beneath soiled bed cloths and over a perineum and vulva that have not been prepared is not advancing the art of obstetrics and will encounter cases of infection for which he is unable to account.

The doctor who believes that might and only "might is right" is a very dangerous man to attach to the handles of a pair of forceps, if he has the strength to back up his convictions and he will leave a trail of suffering and invalided mothers in his wake, besides contributing materially to the records of infant mortality.

The doctor who applies forceps when the indication is not present because he has other important engagements or because of importunities of the patient or her friends, is subjecting both mother and child to unwarrantable risks. This is equally true of the doctor who fails to recognize or to promptly act upon the indications for interference. The man whose sympathy, lack of courage or confidence in himself will permit him to temporize with a condition that requires immediate attention, will never be a factor in the elevation of obstetrical standards, and will be frequently cheek by jowl with an uneasy conscience, while his antithesis, who is given to obstetrical innovations and rash experiments will assuredly come to grief.

The doctor who conceives that his responsibility begins with the commencement of labor and ends with its termination and the

dressings of the umbilical cord, is scarcely on a scientific par with the licensed midwife. The people are not to be blamed for refusing to pay the doctor a fee for a service that a midwife would render for half the money. Here is where the art of obstetrics is elevated to a plane above midwifery, a term that is obnoxious to most physicians.

The obstetrician's duty is to safeguard the health of his patient from the time that he is notified that his services will be required until the termination of the puerperal period. To look after her mental and physical welfare, to point out a rational regime to assist her through the ordeal of labor with judgment, skill and safety, to protect her from her own indiscretions throughout her puerperium, and to see that the infant is permitted, so near as may be, to begin life's battle without a handicap. These are the elements that constitute the art of obstetrics. We all practice the art in theory, but how many of us are lacking in its practical application. These are reiterated truths that are new to none of us. They are, we may see, the fundamental principles upon which the practice of obstetrics is based, but little by little, and one by one, we are prone to omit little details, from lack of time, lack of proper equipment, or more commonly from sheer carelessness until only those rudimentary principles that experience has taught us we dare not ignore are observed. These are not your faults nor my faults especially, but the faults of the profession as a whole. We all have, and still do omit the application of many little details that tend to further safeguard the welfare of both mother and child. Show me the general practitioner who can say that he always observes every detail of surgical asepsis in conducting his accouchments, and I will show you a man who either does not comprehend the meaning of the term, or who is a relative of Annanias with strong atavistic tendencies.

Again a series of cases in which many of the safeguards have not been observed and in which no serious consequences have resulted may foster a belief that they are unnecessary. I recall a case under extremely unfavorable surroundings where before my arrival the woman had been repeatedly examined by her mother and a neighbor woman, where an attempt to perform version failed and labor was terminated by a difficult high forceps, yet contrary to my conviction that severe infection was inevitable, the puerperium was absolutely normal.

Indeed we so frequently encounter cases where the personal hygiene and surroundings of the patient are so filthy that infection seems unavoidable, that it is a source of constant wonder to us

that more are not infected. However, frequently these cases escape infection, they do not justify us in omitting any precaution that may be undertaken to lessen the chance of their occurrence.

Again, infection is likely to occur when least expected, and from sources remote from the genitals. The only case of septic infection I have ever encountered in my private practice was transferred from a suppurative otitis media, probably by the patient changing her own pads without cleansing her hands.

In concluding this paper, let me say that I am not laboring under the delusion that I am presenting any thing new in the way of obstetrical procedure, but rather emphasizing facts that are so familiar as to be often treated with contempt.

It is not what we know about obstetrics, but the manner and thoroughness with which our knowledge is applied that really counts. If we are to practice obstetrics as an art that will be accepted for its true value by the laity and command suitable remuneration for our services, let us be more painstaking and thorough in observing its details.

Just so long as we commercialize the profession, and put up cheap obstetrical rates as a leader to catch the public will the present low standards exist. Whenever we as a body say to the laity, "We are going to give you a better, a safer and a more skilled service at a slight advance over present rates." and we make our promise good, the public will pay the man that renders them the most efficient service even though this fees be twice that of his competitor.

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REPORT OF A CASE OF THE AUTOMATIC SHEDDING OF THE GALL BLADDER.

H. G. WELSH, M. D., Hutchison, Kansas.

Read before the Kansas Medical Society, May 5, 1911.

M. E., male, age 24, a farmer by occupation was admitted to the Welsh Hospital October 14, 1910. He had been very ill for three weeks and his physician had sent him to the hospital with a diagnosis of appendicitis. A blood count showed a high leukocytosis. He was extremely weak, a very sick man. The recti muscles were tense. There was great tenderness on the right side at and above the McBurney point. The diagnosis not being exactly clear, we decided to open the abdomen in the region of the appendix. On October 15, 1910, we made an opening in that region and found a good sized abscess well walled off. The pa-

tient was in such an extreme condition that I decided not to remove the appendix as it appeared to be well covered up with adhesions, so I packed the abscess cavity with gauze and hurried the patient to bed, and ordered normal salt solution per rectum.

The patient had only a slight rise in temperature at the time he entered the hospital and this did not change much for several days, running from $\frac{1}{2}$ to $1\frac{1}{2}$ degrees above normal.

The patient began to improve, however, the gauze drain being removed on the 4th day, and replaced with smaller gauze packing each day thereafter. On the fifth or sixth day a fecal fistula developed and bowel contents discharged freely for a few days and then healed.

About the fourteenth day after operation, a black object appeared in the wound at the morning dressing and looked very much as though it was a portion of gangrenous gut.

My assistant, Dr. M. C. Roberts, called me to see the case and I told him to repack the wound with gauze and dress it again that night while we awaited developments.

The patient was improving daily, was much stronger and I could hardly think the substance was bowel, although it looked and felt like it. In the evening I went with the Doctor to dress the case and when the gauze was pulled out of the wound the mass came out with it, and at first sight it looked like a piece of gangrenous gut about five inches long.

We took the mass to the laboratory and found it to be about five inches long by two inches in diameter, with an opening at the smaller end, and about half full of a semi-solid or mushy contents.

We decided it to be the gall bladder and sent it at once to Dr. A. E. Hertzler of Kansas City, Mo., for his opinion. In a few days I received a letter from him stating that it was the whole gall bladder.

Two or three days after the shedding of the gall bladder bile began to discharge freely through the wound and did so for several days, and then ceased and the wound gradually healed.

The patient fully recovered and left the hospital December 1, 1910. We found no gall stones at the operation, and none passed through the wound afterwards. Dr. Hertzler kindly preserved the specimen, which I am able to show you today.

I have been unable to find any similar case in the literature at my disposal, and I would be glad to hear if any one else had a case like unto this.

DISCUSSION.

Dr. Axtell, (Topeka): Mr. President, I don't think it would be very

much use for me to try to discuss anything like this, because I have never seen anything like it. We know that Nature obliterates the gall bladder, we have all probably seen that. We have seen the gall bladder gradually dwindle up and dry up until it has become almost nothing, but to see one amputated entirely, I have never seen, and I will let some older men discuss it.

Dr. Munn, (Topeka): I was sitting pretty well back, and did not get the full benefit of the paper. Was it a case of some trouble in the abdomen which resulted in the formation of pus, which the Doctor drained, late in the course of the case something appeared and came out of the wound? That something, upon investigation proved to be the gall-bladder. Is that the story?

Dr. Welch, (Hutchison, Kansas.): That is the story.

Dr. Munn. It reminds me of a case I had some two years ago. A German speaking broken English walked into Stormont Hospital one morning, saying that he had been having considerable pain in his abdomen. We held a consultation over the case, and decided that something was wrong in his belly, though it was grave enough to demand an abdominal section. Possibly not absolutely necessary, but his best interests made it advisable to do so at once, that the matter of safety he presenting some evidence of sepsis. After some hesitation, he consented. We made the incision high, as the mass was slightly to the right, and above the usual location of appendix abscesses. We could not find the gall-bladder. The appendix was normal, but we did find a mass of stuff that was covered and surrounded by the omentum together with some free pus. We thought the mass was inflammatory, looked like plastic matter. We scratched our heads, and finally decided that the best thing we could do was to close the incision and leave free drainage. After he was taken from the operative room we made an examination of the "plastic material." It was gangrenous, and spreading it apart and looking through it we found some gall stones. Examining further, found it to be a completely amputated gall bladder. We decided that he would die with peritonitis, but he got well.

In looking up the authorities later I found it was a very rare condition. It did occasionally happen and was usually discovered after death, but it was rarely found in patients before death. It had happened perhaps once or twice in the experience of men who did a great many abdominal sections.

Dr. Welch, (Closing the discussion) Mr. President, I am glad to hear that some one found something similar. Dr. Munn's case must have been similar to a certain extent, at least; and I presume there have been other cases similar to this one. We seldom find anything new; but I have not been able to find anything in print on the subject, and perhaps later on I will find something.

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Do not refract a patient for glasses without first making a thorough ophthalmoscopic examination.

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The old treatment of fracture of the neck of the femur by Buck's extension is as bad as it is archaic. In all but very old and very feeble subjects reduction and fixation in plaster by Whitman's method is the treatment of choice.—American Journal Surgery.

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The history of typhoid several years previously will explain many cases of otherwise obscure localized bone abscess. The perforating cortical ("shirt-stud") abscess is characteristic of typhoid infection.—American Journal Surgery.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

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The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the Wichita Medical Journal, owned by Drs. W. H. Graves and G. K. Purvis, and the Western Medical Journal, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1905, it incorporated the Wyandotte County Medical Journal owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

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EDITORIAL

To succeed financially, a knowledge of how to spend money is quite as essential as how to earn it.

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When you receive a copy of your discussion of papers read at the last meeting for correction, please return them without delay to the editor. Copies of discussions have been sent out which have been delayed until too late to publish and some of have not been returned at all.

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What A Medical Society Means to A Physician.—It means first, a constant post-graduate course of study. Where physicians both old and young meet on an equality, discuss cases from every angle, advance new ideas and review the older ones. Where theory and practice are put to the test and worked out to successful conclusions. Where cases of doubtful diagnosis can be discussed and experiences related along lines of mutuality. Where almost forgotten teachings are brought to mind, and their importance realized. Where a flagging ambition is stimulated and new courage instilled. Where friends and goodfellowship are renewed and relaxation enjoyed. Withal it means keeping abreast of the profession and not in the rear rank. Can you afford to do without it?

The advertising in the Journal helps in a material way to pay the expenses of its publication. Advertisers of course will not advertise unless they see sufficient returns to justify them. Now it behooves us to support in every way possible the firms who have faith in our Journal. For instance if there are two or three surgical or medical firms handling the same products and one of them advertises with us, please send your business to the one who does and thereby prove that his judgment is good, and his results better.

In last months issue of the Journal was published a set of resolutions adopted by the Golden Belt Medical Society, in reference to the candidacy of Mr. Arthur Capper for Governor. Mr. Capper is editor of the Topeka Daily Capitol and in such capacity has and does publish the advertisements of "Dr". Carson and his "Temple" of Health. When he was interviewed upon the subject by a committee from the state society who requested him to remove the objectionable advertising he gave them scant courtesy and refused to do so. Now under the circumstances, we as members of the state society, should use our best endeavors to keep out of office a man whose methods are so at variance with our ideals, and when the time presents itself work most industriously to prevent him from holding a public office.

At the present writing it looks as though the charges preferred against Dr. H. W. Wiley by his accusers who seem to be backed up by the *interests* will likely act as a boomerang. The investigation being conducted by a Committee of Congressmen has brought out testimony which has proven beyond a doubt that Dr. Wiley has used his best efforts to enforce the Pure Food and Drug Laws, and that other members of his department have tried in various ways to annul the good work the Doctor has done. We have yet to see why Attorney-General Wickersham should "permit" Dr. Wiley to resign, but on the contrary we think some of the other members of the board should be "allowed" to do so. The evidence so far submitted shows that Dr. Wiley is not even guilty of a technical violation of the law in paying Dr. Rusby to assist him in enforcing the law.—Certainly the payment of \$20 per day for reliable expert work such as Dr. Rusby has done cannot be an offense, since sums many times that size have been paid out of the contingent fund where the results attained were in no wise comparable. It looks like the same old fight of the fruit and vegetable packers, who want to use benzoate of soda,

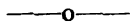
which will enable them to use inferior material in a marketable way. Granting that the use of benzoate of soda when taken in small quantities does no physical harm, the fact remains that it permits the manufacturers to use inferior goods, which does the actual damage. In the New Jersey State Medical Journal for August are published the statements of two manufacturers which speak for themselves:

"Dr. Wiley's condemnation of benzoate of soda and artificial colors in food products is supported by our own evidence that their use is not necessary when clean, wholesome, sound materials are employed. We learned long ago in our Premier kitchens that it was not necessary to use a chemical in order to prevent fermentation or a coal-tar dye in order to make our products attractive. Such aids are only required where unscientific cooking prevails. Benzoate of soda, benzoic acid and all other preservatives and artificial colors are unnecessary. They are absolutely excluded from our kitchens."—F. H. Leggett Co.

"We have no quarrel with the Pure Food Laws of the country or with any officer charged with their enforcement. We use only fresh, sound fruits and vegetables. These are prepared by neat, uniformed work people, in clean kitchens, without the use or need of benzoate of soda or other artificial preservatives. We welcome now, as we always have, the strictest enforcement of all pure food laws."—H. J. Heinz Company.

After perusing these statements by far the wisest plan in buying canned goods would be to carefully examine the label and see that benzoate of soda was not used as a preservative.

In conclusion, would it not be well to singly and collectively give our endorsement of Dr. Wiley and his methods, to President Taft.



Our Society.—How to Improve It.—Since it will be sometime before the next annual meeting of the State Society we might indulge in a few thoughts upon the ways and means for bettering the Society. In the first place should we not have more members? There are according to the last A. M. A., directory, 2650 practicing physicians in the State of Kansas. Supposing 400 are irregular or ineligible, we then have a balance to draw upon of 2250. Our membership for the past three years has been between one thousand and eleven hundred which would leave a balance of "outsiders" more than totaling the number of members. We ought to have a large part of them in the society, and it will take individual and collective effort to bring this about. Our state

secretary cannot be expected to tour the state in quest of members but each county society should have a committee on membership whose duty would be to actively canvass their respective counties and increase their membership to include every available physician. Many doctors have not even been asked to join the County Society, much less to be shown the advantages accruing by becoming a member. So let's wake up and bring up the membership to a total where it rightfully belongs.

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The attendance at the annual meeting should receive more consideration. It must be advertised and encouraged to a greater extent. We ought to have double the attendance at the meetings than we have had in the past. Certainly no one wants to prepare an exhaustive paper which requires a great deal of time and effort only to read it before a mere handful. Consequently programs will get more difficult to fill as time wears on, and an uninteresting program will further decrease the attendance. These two work hand in hand. We must, if possible, get out the programs earlier and try whenever possible to get the newer topics or the ones that command the more general interest. We then should see that each member has his program thirty days before the meeting, giving him a chance to get up sufficient interest to attend. Announcement of the State meeting and a reading of the program should be made at every county society meeting in the state at least two weeks before the annual meeting.

When we have engendered more interest in the annual meeting then we can expect to have a larger attendance.

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From A Country Doctor.—The *study* of medicine requires health, wealth, industry, intelligence and a spirit of "go-aheadness". The *practice* of medicine requires more health, more wealth, more industry, more discernment, self-denial, governable disposition, and a knowledge that the least returns are made according to the efforts expended of all the professions on the face of the earth. Success in the practice of medicine comes to few who have not the means to complete the proper training and a capital to fall upon during the inactive "getting started" period. Keeping up appearances gets business more rapidly, especially at the start, than the successful treatment of cases. Health is really the first requisite for without it the machinery fails to work, no matter how much it is oiled up with wealth. The sleepless nights, the irregular meals and hours requires a constitution much above the weakly. Intelligence, industry and ambition go hand in hand all

three of which are prime factors in advancement. Self-denial which so many of us lack means the ability to take off our "Sunday Clothes" when just ready to start to the entertainment, church fair, etc., and sit up the major part of the night aiding the Stork who seems to confine his work mostly to lamp-light. Take it all in all there is, or must be a fascination that draws us to this humanitarian work, to receive no plaudits, but to work untiringly until the end, hoping for a reward not extended by human hands.

The following letter has been sent to every county society in the state. It is to be hoped that it will bring results. We can all do a great deal of good in ridding the state of these evil-doers. Persistent work is necessary and every hour and penny spent in helping to enforce the law will bring about a just reward. Under the circumstances the county societies should take hold, and bend all efforts to a successful cleaning up in the state.

GENTLEMEN:

I wish to call your attention to a letter of Dr. H. A. Dykes, Secretary of the Board of Medical Registration and Examination, issued under date of July 5, 1911, relative to the institution of proceedings against all illegal practitioners in Kansas.

I wish to state that the Board has not sufficient funds to prosecute those cases, and hence they are unable to do the work that should be done. I wish to appeal to the officers and members of your county, to take this matter up in an official way, and furnish evidence and issue complaints to the County Attorney in every possible way in the prosecution. I feel that no county society could spend their funds in a better way than to assist in stamping out those who are violating the law, and assure you that the state society will do everything in its power, as far as the funds will permit, to assist in any prosecution that may be brought.

This was the unanimous decision of the Council, at the meeting held in Kansas City, in May.

Do not throw this letter aside, but take the matter up officially in your Society and see if you cannot obtain results.

Yours truly,

Aug. 5, 1911.

CHAS. S. HUFFMAN, Secretary.

The following letter is a copy of one sent to Governor Stubbs by Dr. H. A. Dykes, Secretary of the State Board of Medical Examination and Registration:

Lebanon, Kan., August 4, 1911.

Gov. W. R. Stubbs, Topeka, Kansas.

DEAR GOVERNOR:—I have been instructed by the Board of Medical Registration and Examination, to explain to you the situation of "Chiropractice" in Kansas. To be honest and frank with you, it is nothing more nor less than the worst kind of quackery and deception. A chiropractic College or Infirmary, has been claimed to exist, in Coffeyville, Arkansas City, Hutchison, Wichita, Topeka, Beloit, Scott City and other places in this State, which were nothing but small rooms, two or three generally, sometimes a rug and more often none on the floor, with the parties in charge, claiming to be able to grant and sell Diplomas for \$150 apiece, with three months instruction, whether the student has any or no education and in proof of this see letter attached hereto from the Coffeyville Chiropractors who were offering a Diploma and a three months course for \$150 authorizing the holder thereof to kill little innocent children in Kansas. Since discovering that they were simply a fraudulent outfit and prosecutions started this same man Crabtree at Coffeyville plead for mercy over his signature under date July 1, 1911, promised to leave the State and quit violating the law and said he was going off to study Medicine and Surgery. They represent to you that they have a great number of these practitioners in Kansas, when in fact, there are only about twenty, including their wives, according to their own M. C. A. Directory, a copy of which I herewith enclose and call your attention to page 82 therein. The county attorneys in the counties where these outlaws are located with two or three exceptions have reported that these parties, have either left the State or are being prosecuted, whose names you see on page 82. I also call your attention to pages 87, 88 and 89 where the father of Chiropractic graft, ignorance and imposition has headquarters advertised at Davenport, Iowa, fleecing his victims for \$200.00 each, many of them being from Kansas, which money he obtains under fraudulent pretenses, by claiming that his Chiropractic Diplomas entitles the holder thereof to practice Medicine in Kansas, by calling such practice "Adjustments of the Spine", in order to evade the law, and the only preliminary entrance requirement to obtain his Chiropractic Diploma is \$200.00. One of these Chiropractors presented himself and took the examination in June 1911, before our Board and admitted under oath that he had no preliminary education on Dr. Charles J. Simmons' branch. Physiology he made a grade of 14 and on Anatomy 16, and yet he persists in violating the law at Stafford, Kansas, while under bond to appear at the next term of the District Court and he has no more knowledge of diseases or their treatment than a horse. Chiropractics Diplomas are nothing

more legally, than fraudulent paper and have been declared by the Kansas Supreme Court and only a few days ago the by Supreme Court of the State of Missouri, as not being legal and entitles the holder thereof to nothing, from a Medical or Surgical standpoint, in either state. My Dear Governor, an attorney is located in this State, whose financial interests are paramount to the merits of "Chiropractic" and one half of his petitioners, I imagine did not know what they were signing and I presume, the other half did not care, when they placed their names on the petition for the pardon of P. W. Johnson, a Chiropractor of Hutchinson, who was convicted in Stafford County, and who should not receive a pardon at your hands, especially at this time when these fakirs and out-laws are making such a desperate fight on the Medical Board, who are attempting to raise the Medical Standard in this State and accomplish the purpose for which you appointed them and be recognized as an efficient Board in and out of the State. I have the honor to inform your Excellency, that every member serving on the present Board has been appointed by yourself and that the Kansas Board is now recognized by thirty sister States on reciprocal registration and I beg of you to investigate these so-called "Chiropractors" and you will find them as I have, to be without any preliminary education whatever, with no knowledge of Medicine and Surgery, and worst of all, they teach the people that such diseases as consumption are not communicable from one person to another, oppose quarantine regulations and absolutely disregard sanitary surroundings, disinfection or isolation of diseases, which facts you will discover by reading their Journal herewith enclosed. Men have been sent to the penitentiary in Chicago and elsewhere for selling fraudulent Diplomas, on a basis of these "Chiropractors" tactics at Coffeyville, Kansas, and elsewhere in the State. My Dear Governor, I have given you the facts regarding these charlatans without prejudice and every Medical man in Kansas, or elsewhere, who has investigated them will bear me out in every statement. Under the present Medical law they are simply medical outlaws.

The Board of Medical Registration and Examination beg to enter their protest against the pardon of P. W. Johnson, Chiropractor, convicted in Stafford County Kansas for violation of the Medical practice act.

Yours very truly,

H. A. DYKES, M. D.

Secretary State Board Medical Registration and Examination.
The letter from the Board of Medical Registration and Ex-

amination to Governor Stubbs, published in this issue of the Journal, clearly sets forth the status of the so-called "Chiropractics" in this state.

Every physician who has at heart the welfare of the public and the honor of the State should join the Board in its protest to the Governor against the pardon of this Chiropractor who was convicted for violation of the Medical Practice Act.

Such convicts deserve no consideration whatever, for the reason that their cult was never conceived with honesty of purpose in view as shown by their practices. Their schemes have been laid to make a technical evasion of this Act and now that some of them have been caught in the meshes of the law they sought to evade, they should be made to suffer the full penalty.

The courts having decided that these fakirs can no longer practice their deception in this state it is no difficult task to imagine what they are planning to do at the next session of the legislature. Those who are familiar with conditions that prevailed at the last session are fully aware of the powerful influence exerted from this source.

If our committee on Legislation and Public Policy is expecting an easy task to accomplish what it is expected to do, it should at once organize and commence an active campaign.—J. E. S.

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SOCIETY NOTES.

The Northeast Kansas Medical Society will meet at Kansas City, October the 26th. There will be two sessions one in the afternoon at 1:30 and the other one in the evening, at 7:30. A dinner will be extended the members and guests at 6 o'clock by the Wyandotte County Medical Society. The full program will be published in the October issue.

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The annual meeting of the Medical Association of the Southwest will be held in Oklahoma City, October 10-12 1911. The physicians of Oklahoma City are making elaborate preparations to entertain the society, and the scientific program is the "best ever." An unusually large attendance is looked for. The meeting will be held under the presidency of Dr. M. L. Perry of Parsons. Kansas,

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The Labette County Medical Society held its regular meeting in Oswego July the 26th, twenty-four doctors were present, and an excellent meeting resulted.

Dr. E. E. Liggett of Oswego, demonstrated two cases of Pella-gra, occurring in a mother and daughter, the child being but 5 years of age. The patients showed pronounced skin lesions, and had a history of persistent diarrhœa, with mental depression in the mother. A full discussion followed,, Dr. Crumbine of the Board of Health, who had been notified of the cases, was present and agreed with the diagnosis. It is believed that these are the first cases reported from private practice in Kansas, two cases were previously reported from the State Hospital at Parsons.

Dr. Geo. Liggett presented a boy with peculiar chest findings, probably due to tuberculosis.

Dr. Emma Hill showed a patient who had recovered from pyemia under vaccine treatment.

Dr. Geo. Liggett, R. L. Von Treba, and R. L. Bennett read papers on Infection, each discussing a different phase of the subject.

Dr. Christman read a paper on the Examination of the Blood.

Following the program the society was entertained at a banquet by the Oswego doctors.

O. S. HUBBARD, Secretary.

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NEWS NOTES

The Wyandotte County Medical Society will open the fall session October 3, 1911.

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Dr. Frederick W. Shaw sailed July 15, for Manilla, Phillipine Islands, to enter the U. S. Army Service as captain in the Medical Corps.

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The University of Kansas School of Medicine opens their thirty-second session September 13, 1911, at Lawrance, Kansas.

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Dr. S. G. Zinke has removed from Leavenworth to Kansas City, Mo., where he has accepted the chair of genito-urinary surgery in the Post-Graduate Medical College.

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The Kansas Medical College (Medical Department Washburn) of Topeka, opens their twenty-second session, September 12, 1911. The Dean is Dr. William E. McVey.

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Dr. Osler, formerly professor of medicine at Johns Hopkins University, Baltimore, and now regius professor of medicine in

Oxford University, England, has recently been made a baronet by King George, being one of the honors conferred in connection with the King's coronation.

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Our secretary, Dr. Charles S. Huffman, spent August at Fort Riley, where he had charge of the State Militia during the encampment. He carries the title of General. We are not informed as to the correct number of guns fired to salute the General, but we are fully informed as to the importance of the office.

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The hospital staffs of the two Kansas Cities are to have a Clinic week October 2-8 1911. The plans are for clinics in the mornings with medical and surgical meetings in the afternoons. Every thing is free and with the Priest of Pallas attractions for evening relaxation, a large crowd will undoubtedly turn out from the South-west. The program will appear in a later issue of the Journal.

Case Reports.

Rupture of Superior Vena Cava.—E. E. Sherrard and C. A. Smalley, Los Angeles, Cal. (Journal A. M. A., July 29), report the case of a woman, aged 53, in supposed good health and who had not had a doctor for twenty years, who was found in complete collapse which came on suddenly while preparing to go out. Her lower extremities were cold and paralyzed. She suffered from air hunger and complained of pain in the left axillary line on a level with the nipple. Temperature was 97.5, pulse 45, weak and thready. She improved slightly under treatment for a day or two but suddenly expired while being bathed. The organs were mostly normal. There was some sclerosis of the aorta and pulmonary arteries and the liver was much enlarged and, with the portal veins, much congested. The superior vena cava was ruptured within the pericardium, which was filled with blood and clots. The tricuspid valves were normal, but were incompetent from dilatation of the right auriculoventricular ring. No cause was discovered for the rupture other than the conditions mentioned, but the authors suggest as probable the following sequence of events. The lack of elasticity in the pulmonary arteries was enough to retard the blood-current through the right heart and the increased effort was enough to produce dilatation of the auriculoventricular ring, with consequent incompetency of the tricuspid valves. This permitted congestion of the liver

and portal veins and after the inferior vena cava became engorged the back pressure was too great for the superior vena cava which gave way. They think the whole process could have occurred but a short time or symptoms would have been earlier complained of and the left heart would have shown signs of hypertrophy. Perhaps the forty hours of acute illness of the patient would cover the whole. Spontaneous rupture of the superior vena cava is so rare as to be almost unique. The authors have been able to find but one reported case in their examination and no mention whatever of such a condition in the works on pathology consulted by them.

Remarkable Ante-Mortem Rise of Temperature.—H. W. King, New Orleans, reports a case of tuberculosis meningitis in which the temperature on the fifteenth day of illness reached 105.2 degrees F., with a pulse of 110 and respiration 46. Within the next two hours there was a decline of two degrees, though the pulse rate was increased to 128 and respirations had dropped to 36. For five hours, temperature (103 degrees F.), pulse (128) and respiration (36) remained unchanged, and then within the short interval of three hours, the temperature leaped to 106.5 degrees F., and pulse 140, respiration 48. The sudden change was noted at 6 a. m., and three hours later, temperature was 107 degrees F., pulse 145, respiration 60.

From this hour, the temperature kept mounting higher. To avoid the chance of error in observation, several thermometers were used, all with the same result. At 1 p. m., the temperature was 107.8 degrees, pulse 170, respiration 76; and at 5 p. m., the temperature had reached 110.8 degrees. Forty minutes after this recordation the patient expired. A complicating terminal pneumonia hastened the end.

As a rule in tuberculous meningitis, just before dissolution, the temperature sinks to 94 or 95 degrees, though there may be a hyperpyrexia. Osler calls attention to a case of Braumler's where the temperature rose just before death to 110.7 degrees.

The diagnosis of meningitis was based on the following facts:

1. The previous personal history of poor health and enfeebled constitution.
2. The illness, influenza preceeding the general collapse which rendered the patient fertile for tubercular infection.
3. The evidence of pulmonary involvement—persistent cough, great loss of weight and other physical signs.
4. The meningeal manifestations—cervical rigidity, Kernig's sign and clinical phenomena peculiar to meningitis.

5. The cyto-diagnostic evidence as revealed by examination of the cerebrospinal fluid—the amount of fluid—the clearness of the fluid—the high pressure at which it was obtained—the delicate, though firmly coagulated fibrin clot—the marked lymphocytosis, and Noguchi's test positive.

6. The death of the patient.—Virgian Medical Semi-Monthly.

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Mercuric Chlorid Poisoning.—J. M. Mabbott, New York Journal A. M. A., August 5), reports a case of mercuric-chlorid poisoning with ptialism, stomatitis, urinary suppression, vomiting, etc., following vaginal hemorrhage treated by tampons soaked with bichlorid solution applied to the bleeding cervical laceration some days after confinement. He also used bichlorid solution (1 to 4,000) douches, though the nurse claimed that the second of the two douches was only sterile water. The teaching of obstetrics justified his practice in this case, but it shows that a combination of conditions is possible under which poisoning may occur from a vaginal douche given a whole week after labor. The patient was recovering from the poisoning when she was taken with intercurrent bronchopneumonia and edema of the lungs, which carried her off three weeks after the poisoning and four weeks after labor.

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OBITUARY.

Dr. Edward Crawford Rankin, for many years a prominent and beloved physician at McLouth, Kansas, was born near Phillipp, W. Va., Aug. 3, 1853, of Scotch parentage. Most of his mature life was spent in Kansas. He was an alumnus of our State University, a graduate of the Kansas City Medical College, and a man widely honored in his profession. He was converted at the early age of ten, and at that time united with a Presbyterian church. In 1892 he became a Baptist and presented himself for membership with the McLouth Baptist Church. Rev. J. M. Whitehead baptized him. He was soon chosen as a deacon, and elected to other offices in the church. As the years passed by he proved his fidelity and usefulness in all these positions. A Christian physician, to whom life was sacred and the elimination of suffering a holy ministry. He was held in high esteem by citizens and friends. He was a life member of our Convention. On the first day of June, 1910, at St. Mary's Hospital, Kansas City, in an operation that was hoped to bring him help, he passed away. His family, church and community greatly miss him.

Baptist Annual.

Joseph H. Baxter, M. D., Bellevue Hospital Medical College, 1884; for forty years a practitioner of Columbus, Kan; died at his home in that city, July 14, aged 63.

David W. Else., M. D., Kansas City, (Mo.) Hospital Medical College, 1885; at one time coroner of Cloud County Kan; died at his home in Concordia, July 2, from heart disease, aged 70.

Hubbard Linley, M. D., University of Nebraska, Omaha, 1893; a member of the American Medical Association; division surgeon of the Missouri Pacific Railway, with headquarters at Atchison, Kan; a member of the local board of pension examining surgeons; died suddenly in his office in Atchison, July 14, from heart disease, aged 51.

John Jacob Wuerth, M. D., College of Physicians and Surgeons, Chicago, 1898; of Chicago, a member of the American Medical Association; died at the home of his parents in Lawrence, Kan., August 3, from an accidental overdose of strychnin, aged 43.

CLINICAL NOTES

Mayo says that the old idea of gallstones without symptoms must now be acknowledged to be incorrect. We have become better informed by operative experience with the disease. He questions the high percentage of gallstones in the general population as estimated by some good authorities and thinks it is more probable that not over 0.5 per cent would be a fair estimate of the frequency of gallstones in individuals of all ages, although evidence at hand shows that from 5 to 8 per cent of women and from 2 to 4 per cent of men have gallstones after the age of fifty. The symptoms may not be recognized as regards their source though appreciable to the individual and to the observer. He has been impressed with this fact on finding undiagnosed gallstones in operating on women for pelvic trouble.—Ohio State Medical Journal.

For Sale.—Yale operating chair, in good condition, address, Dr. A. H. Connett, Great Bend, Kansas.

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TRAUMATIC NEUROSES.

DR. O. D. WALKER, Salina, Kansas.

Read before the Kansas Medical Society, May 4, 1911.

In a paper read before this society two years ago we considered organic diseases of the nervous system due to traumatism. In these organic lesions we found that the effect upon the nervous system were as a rule immediate, that the symptoms were well defined and pointed quite definitely to the part of the system injured.

In the nervous affections considered in this paper there are no definite or known organic lesions, the effects of the traumatism are as a rule not immediate, and the lesion is psychical rather than physical.

The nomenclature of these disorders are legion, they have been and are still called by such names as "Railway Spine," concussion of the spinal cord and brain, spinal anæmia, traumatic neurasthenia, traumatic hysteria, etc.

The history of this nomenclature dates back some 45 years when Erichsen first published his work on "Railway and Other Injuries of the Nervous System," written at a time before neurasthenia and hysteria were fully recognized and when meningitis and spinal anæmia and hyperæmia were the common terms used for indefinite lesions, the author fell into grave error regarding the pathology and today among writers, Erichsen's ideas are practically obsolete. Erichsen regarded the symptoms as due to a spinal concussion, and that this produced molecular changes in the cord and brain causing anæmia or hyperæmia with meningitis.

The term "Railway Spine" was for many years a name to be conjured with, and Erichsen's work was for a long time an authority with court and juries in the litigation over these accident or traumatic neuroses.

One thing Erichsen did accomplish was to stimulate the study of nervous disorders due to injury.

The next great important work to appear was Oppenheim's entitled "The Traumatic Neuroses, " (1889) in which he entirely discarded the theory of molecular disturbance of the nervous system. He held to no structural lesion of the nervous system and although recognizing the close relationship between these neuroses and neurasthenia and hysteria yet he held them to be a separate type and due to traumatism of the nervous system. He spoke of a local traumatic neuroses causing monoplegia contractures, joint neuroses, etc., which today are considered as due to hysteria and requiring no separate nomenclature because following injury.

So it is with all neuroses following traumatism, there is now quite a unanimity of opinion that all these affections can be classed under the well recognized neuroses and psychoses even though the symptoms do follow and are dependent upon some injury either physical or psychical.

Traumatic neuroses may follow any accident where injury and shock are prominent factors. Accidents which become the subject of medico-legal inquiry are more frequently followed by functional nervous disorders than by organic injuries of the nervous system.

Walton found in 100 successive cases where the nervous system was disturbed and where litigation was in process or threatened, the injury in these cases ranging from slight bruises and jars to severe lesions, that 17 cases showed unmistakable organic lesions of the spinal cord and brain, the remaining 83 cases manifesting in many severe nervous symptoms but no organic lesions could be made out.

The work of Erichsen gave such an impetus to the study of Railway injuries that today it has assumed such proportions as to require a special literature of its own, and notwithstanding the many safety appliances added to every Railway equipment, the increase of travel has been so great, together with the disposition on the part of the injured to resort to litigation as to materially increase these accident neuroses.

It is worthy of note that in some of the distressing Railway

collisions that those escaping death but suffering severe bodily injury, often make a speedy recovery, maimed though they be in body and limb, while another large class who may not complain of any gross bodily injury and who receive the congratulations of friends on account of their good fortune, will in a short time following the accident develop one of the functional neuroses which put them in a worse condition than their maimed companions.

Fright is an important element in these functional neuroses. Anyone be he physician or not well knows that emotion plays an active part in the production of disease. It is a common observation to note many affections and especially nervous ones following great catastrophies such as earthquakes, cyclones, conflagration and battles. That fright is a contributing factor in the production of disease no one can doubt but that it is the direct or sole cause of disease other than nervous is doubtful. General medical diseases are made worse by emotional excitement and the bodily resistance is lowered and thereby more susceptible to infections, but we do not believe the emotion is the sole cause of such disease. In the neuroses such as neurasthenia and hysteria it is different; here fright and psychical shock may be the sole agent. In sudden death while fright may lead to heart failures or apoplexy, yet there must pre-exist some disease of the heart or blood vessels.

Predisposition is an important item in the production of the accident neuroses. A neurotic temperament, persons who have been indulged in youth, who have not had a wholesome discipline so as to develop the normal inhibitory powers of the body and mind are apt to give way when the strain comes.

If there is any pre-existing organic disease especially of the nervous system, trauma may greatly aggravate the symptoms. The injury seems capable of hastening the morbid processes, thus bringing about terminal stages of disease which might otherwise have remained stationary or at least made very slow progress. Occupation and mode of life exert a certain influence on production of the neuroses. Railway employes with the exception as pointed out by Bailey of locomotive engineers and postal clerks, and electric line men who are familiar with the effects of electricity are less likely to suffer nervous shocks following accidents than are passengers and ignorant citizens who not knowing the effects, allow fear and dread to take possession of them and thus induce these nervous disorders. The suggestion by physicians of a fear that some serious trouble may follow some accident undoubtedly contributes frequently to the development of the very disease feared by the physician.

Intimately allied with suggestion as a causative factor of the traumatic neuroses is the question of litigation. Upon many points authorities disagree but upon the effects of litigation all agree.

Any case of medico-legal inquiry following accident there is much more probability that some neuroses will result or if already started will be made worse by such inquiry, and that patient has little chance for improvement till all legal questions are settled. It surrounds the patient with the influences from which he should be free and prevents him from pursuing the course of treatment best suited to permit a return of health and of self control. It is our duty as physicians to favor an early settlement of all claims and thus prevent these long drawn out litigations which subjects our patients to conditions of chronic invalidism.

The symptoms of the traumatic neuroses like the symptoms of neurasthenia and hysteria are largely subjective. We have taken the position earliest in this paper that the traumatic neuroses deserve to be placed in no special class but fall under the heads of the various neuroses.

In private practice the physician usually takes the statement of his patient suffering from purely subjective symptoms as in a measure at least true and as causes of annoyance or suffering; even here the wise physician takes these statements with some grains of allowance and often finds them from the very nature of the disease largely exaggerated. When litigation enters into the case the physician should be especially careful in forming his opinion, and he must be on his guard not only against exaggeration but malingering as well. The physician must recognize the possibility of fraud, he must be familiar with the diagnosis of nervous affections and to be fair must believe in the real entity of neurasthenia and hysteria as diseases that are often intractable and sometimes incurable.

The examiner by whom employed should undertake the examination without bias; he should ever be true to his client but at the same time his opinion should be based upon a thorough examination. He should always remember that his function is scientific and not mercenary.

Few patients who ask for damages from a corporation intend to defraud or deceive. The statements of the patient may be unreliable suggestion that many things they rehearse have been told them over and over by sympathizing friends until the patient actually believes them. He naturally wants to make as strong a case as possible against the defendant. Physicians then while

making careful note of the complaint of patients must especially where litigation is a factor require corroborative proof before accepting the statements made to him as unreservedly true.

The symptoms of the traumatic neuroses are practically those of traumatic neurasthenia or traumatic hysteria. The onset may begin at the time of the accident or it may be delayed for days. In most of these accidents there is a general concussion or jarring of the body. As a rule local symptoms no matter how severe do not give rise to the neuroses. The injury to the nervous system, however is not measured by the force of the physical shock but is due rather to the psychical shock. In ordinary accidents causing sometimes severe injuries such as falls do not as a rule produce profound effects upon the mind but when the accident however slight is attended with those shocking heartrending sights which follow many railway accidents, the emotional disturbance is much greater than the physical, when in addition there is the terror of personal danger incurred, it is not remarkable that even without physical injury the victim may be profoundly affected.

In the case where fear and terror play an important role there may be all the symptoms of surgical shock, pallor, weak rapid heart, nausea, faintness to unconsciousness, which may last several hours and upon the patient coming back to consciousness will manifest all the *bizarre* symptoms of hysteria. From these severe cases there are others with symptoms much less profound down to those where they are not aware of any injury whatsoever and these latter may be among the busiest of the busy caring for those more severely injured.

The symptoms of traumatic neurasthenia and hysteria may appear very suddenly. Time will only permit the mere mention of the more prominent symptoms.

As in neurasthenia proper there is more or less diminution of nervous energy together with an excessive response to external impressions. Pain in the back is a prominent symptom. The patient is often peevish, irritable, introspective and inattentive. He is capable of no continued physical or mental effort. He is often moody, depressed and hypochondriacal. The reflexes are generally exaggerated. Tremor is a frequent symptom resembling very much the tremor of alcoholism. Thus he finds himself in a vicious circle. By constantly thinking of his ills he makes his condition worse. Yet the same exhaustion of the nervous system which has undermined his health also robs him of his self control and independence. His inhibitory powers are all lacking.

In traumatic hysteria the symptoms fall under two general heads, paroxysmal and interparoxysmal. The former are the more spectacular but the latter the more important. It is hard to draw the line between neurasthenia and hysteria. The latter is characterized by more profound symptoms, where in neurasthenia we have a weakness in hysteria we may have a paralysis, where in the former we have increased excitability in the latter we may have convulsions.

Anesthesia is one of the most common stigmata of hysteria. Tactile sense is most disturbed. The analgesic sense in certain parts of the body may be completely lost. The special senses are often disturbed, probably vision is the most common, this may vary from a concentric limitation to a complete amauroses. There may be hysterical deafness and hysterical aphonia. Motor symptoms vary from muscular weakness to complete paralysis. Hysterical paralysis is never limited to the distribution of single nerves, but like all cerebral palsies it affects definite movements or group of movements. Contractures are frequent with paralysis and simulate perfectly the paralytic contractures but will relax under the effects of an anesthetic.

In the diagnosis of these traumatic neuroses we must be on our guard against malingering.

The view point of the average individual with reference to a corporation and especially a railroad is very different than this same person would take towards a private individual. And since corporations find it cheaper to settle claims than contest them and since medical and legal services are obtainable upon the contingent fee basis it is to be expected that feigning, exaggeration and pure malingering will occur in personal injury cases.

Three ways of fraud are attempted.

1. By exaggeration of all symptoms.
2. By claiming that pre-existing disabilities were caused by the injury.
3. By malingering pure and simple.

From the very nature of things exaggeration of symptoms is common in the neuroses; this is one of the symptoms of the disease. We must be careful therefore not to charge all exaggeration as wilful on the part of the patient. This fact is too little recognized both in and out of the medical profession. Claim agents are apt with their limited medical knowledge to put the brand of fraud upon all claiming damages for injury which do not show a physical basis. On the other hand physicians become too gullible and take the statements of their patients as essentially truthful.

It is not uncommon in cities that persons suffering from pre-existing disease and deformities will claim their present condition as due to the direct cause of some accident or injury and thus seek to obtain large indemnity for a disease which has existed for years. These persons are sometimes the tool of designing and unscrupulous agents who deliberately attempt this fraud upon the contingent fee basis. The previous history of these cases is often very difficult if not impossible to obtain guarded as they are by designing friends.

Traumatic hernia among railway employees was for a time the cause for damage suits to such a frequency and so entirely out of proportion to the production of traumatic hernia in other walks of life that it is now the established policy of all railroad companies to make a physical examination of all persons entering their employ.

Pure simulation is comparatively rare, by simulation we mean those cases where there is no foundation in fact for the symptoms alleged. Bailey in his excellent work says regarding simulation, "In my opinion it is distinctly rare. Substitution is much easier than creation and my experience teaches me that most of the frauds in negligence cases are attempted by clever swindlers who get hold of a sick or injured man, teach him the story of some accident and have him swear that that accident caused his disability."

Neurasthenia is probably the most common complaint of the simulator. It is well known that in this disease the symptoms are indefinite and subjective. So long as the claimant confines his complaints to pain in the back, lack of energy, inability to work and others of a purely subjective character, it is hard to prove that these statements are all together false; although the physician may be absolutely sure that they are very much exaggerated. The truth in these cases can be better gotten from sources other than a medical examination.

Where claims of paralysis, anesthesia, convulsive attacks, tremor, defects of vision and hearing and the many other nervous symptoms which may follow organic lesions of the nervous system, a careful examination by a physician who understands nervous disorders and who is sharp to detect symptoms which do not answer to the organic lesion complained of will generally be able to point out the fraud in these cases.

This statement made by Bailey seems to me to be very fair and just. An individual or corporation which is being sued for damages for personal injury should be entitled to ascertain the

character and extent of the injury for which they are held liable. Viewed from a purely commercial standpoint one has a right to know what one is paying for or in other words insist upon a definite diagnosis before payment is made. When the possibilities of exactness in the diagnosis of disorders of the nervous system are more generally recognized and when "shattered nerves" and similar meaningless designations come to be regarded as insufficient claims in negligence cases, the detection of simulation will become very much easier.

These personal injury cases of which the neuroses claim a large share are very much on the increase even when the increase of travel is considered. In 1875 there were about 200 personal injury suits in Chicago. In 1908 it was estimated that there were then pending in Chicago 3600 cases and the damages claimed were between fifty and sixty million dollars. From the report of the Brooklyn Rapid Transit Company for the year 1901 there was paid out more than one million dollars for personal injuries and expenses incident thereto; this sum representing nearly ten per cent of the total gross receipts of the company for that year.

As medical experts we must bear in mind that in the eyes of the jury we are probably considered as biased in the case. Being an opinion it will only have weight when a jury is convinced that it is an honest conviction based upon careful observation and experience and given without bias. If we are called by the plaintiff and are to testify to an examination, we should be thoroughly prepared and no matter how simple the case is, it should call for a careful and thorough examination. Too often we place ourselves in the position of appearing as a partner of the litigant, we should ever steer clear of the contingent fee plan for when we place ourselves in this interested position as with the lawyer who becomes more than advocate, we become more than a mouthpiece of science.

For the prognosis and treatment of these cases I would refer you to works upon the neuroses.

In closing, one point I desire again to emphasize and that is that litigation is a bad thing for our patients and when absolutely necessary the settlement should be as speedy as possible. And in quite a large number of these cases we feel that the observation of a claim attorney of a large western railroad is at least partly correct when he wrote that the best cure is a settlement and "Greenback" plasters the proper remedy.

DISCUSSION.

DR. T. C. BIDDLE: Mr. Chairman and gentlemen, this paper covers a very large field, and I feel that it is crowded, probably, with more or less uncertainty. There is a relation between this paper and the previous one because in these subjects the emotional factor is so important in producing these conditions that it makes a very similar proposition in the two papers. The author has stated the case so well, and has covered the ground as nearly completely as can be in this age of our science, that not much can be said except to compliment him on the way he has treated it. As he has stated, in the neurasthenic cases, if they are malingers, provided they do not go too far, it is hard and difficult to detect in what degree the condition is to be charged to malingering. The tendency, however, is to go too far, and then it can be detected readily, and should be. The general history of these cases is familiar to all, and the conclusion referred to is so certainly true that you have all seen these results; the remarkable results of settlement of a damage claim; so that it seems hardly worth while for us to do more than acknowledge our appreciation of the doctor's paper, and thank him for it.

DR. S. S. GLASSCOCK: Mr. President, the subject of traumatic neurosis in our larger cities is becoming a very important subject to the attorney, physician, man that is injured, and the company. We all recognize that suggestion is a very important thing in traumatic neurosis; and I think we should put down as the principal exciting cause, or one of the principal exciting causes, if not the principal one, the "snitch lawyer." He has great success. He makes a study of these neurotics and gets his client, who is so unfortunate as to have been in an accident. In the first place, these people are neurotics. Then he takes them through a school of drilling, that is very closely akin to mesmerism and works them up to the point where the patient believes he has the condition present. Now, I don't think there is as much occasion to criticise the profession as to criticise this "snitch" lawyer that follows that business and does not do anything else. In fact, the legal profession in our great cities is divided into two classes, the men who try damage cases, and the men that defend them. That is their main practice, with some of these other little things like land titles, and things of that kind thrown in. They have some other cases, but practically the legal profession is divided into those two classes, those that get damage cases, and those that defend them. Now, all these corporations usually have a physician, and he gets his opportunity, and you cannot criticise him any more than you can criticise the lawyer. Then there is another class of the profession, the physician that works for the damage lawyers, who takes his side of it; and the medical man on the other side works for the company. They go to work and dream dreams and see visions, and the jury don't believe anything they say, and pay no attention to it—absolutely ignore them. I took occasion a few times to inquire from these jurors, and they said they did not pay any attention to the talk of the doctors—that they did not know anything about it, and if they did they wouldn't tell the truth about it. So the medical profession is rapidly approaching the position where we will be almost compelled to have nothing to do with that kind of business. That is about the only way a man can retain the respect of his constituents. Of course the individual, when the case is settled, is going to get better. Not many of these are malingering. It is not so much the malingering as it is the snitch lawyer by whom the patient is made to believe this condition of things exists. And there ought to be some means to get at this business so we could do something with it definitely. You take one of these unfortunate neurasthenics, and drag his case out through different courts, and the Supreme Court, and the poor individual has not had much chance to get well during that time. The damages received by these individuals perhaps do not cover the things that they suffer because of what they go through with during this time. I myself have observed a number of these cases, where it would have been absolutely better for him if he had never sued. The amount they get—the lawyer gets half of it, and the court gets some, and the expert doctors get a whack at it, and then some other fellow get a round at it, and by the time the case is wound up, the poor unfortunate sufferer from the trauma, when he gets around to his share, doesn't get enough to pay for the time

he had been laid up. So if there could be some means of putting a stop to it, it would be a good thing. The only thing we can do very much in that direction is for the medical profession not to mix up with it very much; and another thing would be to muzzle the snitch lawyer.

DR. PETERS, (Mankato): There is a kindergarten to this matter, as I understand it. We are somewhat educators, and we are educating not at our medical colleges and societies, but there is a little school in every town, or is in my town, and I have a good many pupils up there for whom I think the kindergarten is the whole thing. We have eight or ten accident associations who do business in our town, and I have had a good deal to do with looking after the interests of the companies; and I find out that the more accident associations work in my town, the more of this trouble, this pretense, this neurosis, this idea of an injury. There is getting to be a routine. It is a routine business. A man stubs his toe, and his leg is half paralyzed. He is learning. It is time for the medical profession to begin to look after accident associations, and let's take a hand with them, let us make the teachers stand up and show what is in it. That is the kindergarten, as I understand it, of this whole thing.

DR. WALKER: I have very little to say in closing this discussion. I think I can agree with about all that has been said by those who have discussed the paper. I think, as Dr. Glasscock says, that the "snitch" lawyer, as he calls him, is quite a common disturbing factor in very many of these cases. He is generally the first fellow on the ground, and he does show a good deal of ingenuity and energy in getting there first in some way; and he takes this poor individual under his wing, and has him all primed up before the family doctor or any of the medical profession get to see him. My idea in preparing this paper was this: As I said, two years ago I had a paper on organic injuries to the nervous system, due to traumas, and the matter was discussed then a good deal along the line of neurosis; and I don't know whether several of my brothers of this society wanted to get me into trouble, or the rest of you into it, when they said they wished sometime I would prepare the other side of this paper on the subject of neurosis. So my idea was to prepare this side of this subject for this meeting; and it was to call your attention to the fact that we are too careless as physicians in making our examinations and in getting on the witness stand and testifying to injuries, that really we simply are gullible enough, as I say, to take the litigant's own statement regarding his injury and not make a careful examination. My view in this paper, is to show more than anything else, that trouble will keep up as long as litigation continues. And as physicians, having the interests of our patrons at heart, we should try to cut this short, as much as possible, and put the patient in the best position in which it is possible to place him, in order that he may begin to regain his health.

HYPOTHERMIA.

Reporting a Series of Cases.

H. L. CHAMBERS, M. S., M. D., Kansas State University.

Read before the Kansas Medical Society May 4, 1911.

A series of recent cases has caused me to take a fresh interest in body temperature and heat regulation and must be the excuse for this paper. The so-called warm blooded animal is supposed to maintain a practically constant temperature regardless of the environment, whereas the other kind is governed in his temperature by the surrounding medium and its temperature

conditions. While there is for each of the latter a certain range that may be called his optimum temperature, he will yet functionate in temperatures far beyond this range. In the homoiothermous or warm blooded animal the range of optimum temperature is very narrow—only a degree or so—and the falling off in function in either direction beyond this is so rapid that even vegetative life is soon destroyed the functions being too feeble to maintain mere life and the animal dies.

Since a warm blooded animal must make provision for cooling when environment is hot and for heating when environment is cool, we should scarcely expect to find the mediation of this function to proceed from any really simple mechanism, and as a matter of fact the controlling or heat regulating mechanism is rather complex.

In this arrangement we have on the one side heat making and heat conservation and on the other heat utilization and heat dissipation. Heat is made chiefly by oxidation or burning (the fats yielding more than twice as much weight for weight as do the proteids or carbohydrates.) Only about one third of the energy thus involved may be made to appear as work. Investigations show that the cross striped muscles are the most important source of heat, indeed they ought to be since they are—exclusive of the bones—about one half the whole body. Glands are next most important, especially the liver, then stomach and intestines. Red marrow produces some heat and nervous system a very little. Balance of bones, skin, and lungs furnish a negligible quantity.

During a day of twenty-four hours one usually loses about twenty-four or twenty-five hundred calories in merely keeping alive and without doing any special work. Of this amount about one hundred and twenty-five calories are used in warming the food and air and about three hundred and fifty more are lost in the water and carbon dioxide of the breath, and there are then lost through the skin about nineteen hundred or two thousand calories per day. This loss is accomplished by conduction, by radiation, and by evaporation, the proportions varying according to the modifying conditions of the environment and the nervous and other conditions of the individual. A dilatation of cutaneous capillaries favors loss of heat for reasons that are obvious, and so does sweating, the evaporation of perspiration from the skin being an important mode of heat dissipation. The organism attempts to keep body temperature at about a constant level and it does so through the mechanism already indicated. e. g. on exposure to heat, the oxidation is reduced to a minimum and the heat dis-

sipation is increased, by the more rapid respiration, the dilated cutaneous capillaries, the increased perspiration with its evaporation, and probably by the ingestion of increased amounts of cold water and foods. On the other hand on exposure to cold, the oxidation is increased, the respiration is slowed (sometimes too slow,) the skin capillaries are obliterated or nearly so, and the blanched skin secretes little or no perspiration thus reducing evaporation to a minimum. The desire now is for more food, especially for more hydrocarbons, and the preference is for both food and drink to be hot.

There seems to be a general tendency to make less muscular exertion in hot weather and more in cold weather, at least within the physiological limits. Also the radiation and conduction losses are greatly modified by the clothing, this modification being accomplished by taking advantage of the possibilities that lie in the varying weights, colors, and textures, of the different materials used for clothing. Since humankind has become so highly artificial, it seems proper to mention these modifications of food and clothing as well as those of housing and travel as arts of the heat regulating mechanism, though in the final analysis of this matter, we must come back to the place of beginning, viz., on the one side we make and conserve heat and on the other side we utilize or dissipate it.

One would scarcely expect the heat regulating mechanism to be fully developed at birth since probably no other function of the body is then completely developed, and observations show that the infant's heat regulation shows a degree of wabbling analogous to that of his digestion, his peristalsis, and the rest. His temperature just after birth usually falls to 94.5 but rebounds in a few hours to 99 or 100 which seems to be about his normal. He is not, however, nearly so well poised as adults and his temperature fluctuates on less provocation and the variations are wider, e. g., it may fall as much as 9 degrees in a pneumonia. Those with congenital heart disease and those prematurely born cool very readily and require therefore, more than the usual artificial aid in maintaining a temperature that will allow life to continue. Graetzer says that "sclerema and hydrocephalus cause considerable lowering of temperature" which seems undisputed in the case of hydrocephalus but is questioned in that of sclerema. Cotton seems to think the sclerema results from the lowered temperature, thus: sclerema may be considered as a solidification of subcutaneous fat, due, possibly, to the hypothermia, since a child's fat solidifies at about 86.6 (adults at 32) which in turn may be due

to the scarcity of olein in infant fat and to the richness in stearin and palmitin.

The clinicians of all times have recognized the danger in any material departure from the normal temperature and have sought always to prevent or correct it. Old Hippocrates thought the indigenous heat to be the cause of life, and something of the remains of this idea may now be seen in the widespread fear of catching cold.

Since fever means hypermetabolism and relative heat retention and hypothermia means lessened metabolism and heat dissipation, one or both, we should expect the latter to be by far the more alarming symptom. In practice it has worked out just this way and we have Scudder in 1891 saying about body temperature: "whilst a decrease of one degree if maintained for a considerable time will result in death, an increase of four to six degrees may be maintained for a month with safety to life" and Caille says, "continued subnormal temperature is a grave symptom especially in diseases characterized by high temperature."

Some drugs render the body less able to maintain its temperature when exposed to cold and we are more or less familiar with a whole group of antipyretics. Landois says that morphine and especially alcohol accelerate the reduction in temperature in mammals exposed to cold.

Various forms of disease may cause or be accompanied by subnormal temperatures, and Vienardt says that they may be seen in progressive paralysis, and in injuries of the cervical spinal cord. Coplin says you may see hypothermia in some forms of anæmia, myxœdema, chronic heart disease, coma, and following shock or severe hemorrhage, also in exhaustion or adanamia, and after fever, especially if long continued fever, as well as after starvation or long exposure to low temperature, these being, as you see, a list of conditions in which there is a lessening of heat production. He also mentions the fact that the circulation of certain poisons in the blood may cause it, and cites diabetes which sometimes lowers temperature as much as nine degrees. All the poisonous antipyretics probably belong in this class of poisons and lessen temperature by lessening heat production or increasing heat elimination, frequently by both.

Osler cites a case of alcoholism which had a temperature of 75 on entering the hospital and which was not yet 91 after ten hours. He also says temperature in apoplexy is often as low as 95, in heat exhaustion, it will reach 95.6, and in the algid form of malaria it will be 96-98, that in tuberculosis of the lungs when

cavity formation is advanced and extending, it may reach 95, and that this is typical of septic infections. In such a case of my own who had a mixed infection of tubercle bacillus and streptococcus, the temperature sometimes passed from 104 to 96 and back in a single day when the cavity formation and sepsis were far advanced. Osler further calls attention to the possibility of seeing subnormal temperature in uræmic convulsions, and Wilcox also speaks of it in heat stroke, Krehl says subnormal temperature may be seen in collapse from infectious disease, in extensive injuries, in severe hemorrhage, in long continued narcosis, and in perforative peritonitis and other severe lesions of the peritonæum. I should guess that the case of the woman reported by Duffy who following an abortion had a temperature of 84 in the mouth (died next day) was suffering from a hypothermia caused by a conjunction of several of these causes, e. g., severe hemorrhage, more or less extensive injury, probably damage to the peritonæum, collapse from the probable infection, and maybe also some drug poisoning.

The subnormal temperature of convalescence from infectious disease seems to be due to the lessened heat production and to a disturbed and comparatively inefficient heat regulation.

The heat regulating mechanism is less effective during sleep and there is usually some fall in temperature, probably by lessening heat production through inactivity, and increasing heat elimination through the relaxed and sweating skin. Theoretically we would expect some cases to show a rise in temperature during sleep but I know of none that have been reported and recorded.

I have already pointed out the extremely narrow range of the optimum temperature in man and do not need to say more about it beyond mentioning that the variations are accompanied by physical and psychical conditions that are fairly constant, the physical side of which shows itself in restlessness—the tossing delirium or jactitation of the older fellows—and the psychical side of which appears in the increased and maybe persistent intellection—a thinking whose conclusions, however, are mostly *non sequiturs* and which are for one reason or another almost wholly unreliable. All this, of course, in a case unmodified by toxæmia or other factors. On the other hand a lowered temperature tends to depression, both corporeal and mental. Patient is now expected to lie still in bed for, even hours at a time, to sit still if up and about, and to think almost nothing at all. The thinking he does, lacks the buoyant confidence of the one who

is over warm and is characterized by depression, lack of confidence, and discouragement.

The group of eighteen cases that I am about to report were all seen during the last of September or early in October of 1910, they all had coated, flabby tongues, apparently all had some acidosis, all suffered some mental hebetude, and most of them were noticeably depressed physically. There was nothing constant about the appetite, the bowel was slow in most, though a few had diarrhoea, the sleep in the main was sound enough but was not refreshing, and there was distressing discouragement in a few cases. The two whose blood pressure records have been preserved were respectively 108, 110. The temperatures of this group ranged from 96 to 98.4, were all taken with the same thermometer—unfortunately now broken—but which registered normal in other people and above normal in some.

There were two cases diagnosed as cough or cough and coryza with temperature at 97.6 and 98.4 respectively and with pulses at 60 and 90 it being of interest that the woman had the lower pulse rate. One case of adenoids had a temperature of 97.8 but came to normal after operation. Six cases diagnosed as autointoxication had temperatures ranging from 96.5 to 98.1 and pulses from sixty to one hundred, being for the later, 60, 66, 60, 100, 85, and 74. One case of gallstone disease had temperatures at 97.4 and 97.5 on the two occasions that I saw him. His pulse rate was then 60 and 73 and he also had the usual mental depression that belongs to bile poisoning. Two cases called indigestion had temperatures at 97.5 and 97.7 and pulses at 74 and 73. One case of headache probably due to some ocular defect had a temperature at 98 and pulse at 74. One sore throat showed a temperature 98.3 and pulse of 59 and was probably then recovering. One case of mumps had a temperature at 96 and pulse at 78, he already being past the stage of elevated temperature before I saw him. One case of constipation had a temperature of 98 and pulse of 74. There were two cases diagnosed as nostalgia which had normal temperatures at first examination but were at 98 on second and third days respectively, this seeming to be an example of the effect of depressive psychic states on temperature.

By way of summary I should say that the hypothermia of the six autointoxication cases was due to the toxæmia arising from the conditions in their own intestines and showing in the faulty metabolism and defective elimination of the cases of this group. The two cases of indigestion constitute a related group with a somewhat different clinical aspect since there is more

disturbance in the alimentary tract and less in the tissue metabolism. The case of constipation was a further modification of this form of trouble in that the essential pathology was all in the bowel and was pretty well confined to the large bowel. The two cases of nostalgia show something of the aetiologic potency of mental depression. The sore throat and the mumps show the hypothermia of convalescence from infectious disease, and the coughs and coryza were probably affected by a similar pathogeny. I have no very satisfactory explanation of the hypothermia in the case of adenoids, and none at all for the headache which seemed to depend on an ocular defect. In the whole group the factor of heat dissipation seems to be almost negligible and practically the full pathological reduction in temperature may be ascribed to the decreased heat production.

DISCUSSION.

DR. M. L. PERRY, (Parsons): Gentlemen, I feel that I am hardly able to say anything that is worth while in discussing a paper of this kind, and that I have nothing of any value to offer. I have seen in a great many cases of nervous depression a tendency to low temperatures; but just what has been the causative factor, I do not know, and I don't think I have anything really of value to say upon the paper.

DR. O. D. WALKER, (Salina): I think I have taken temperature in a great many instances to find out what a normal temperature is. In fact I am here to say that I don't know what a normal temperature is in a healthy individual. I know in regard to my ownself I never yet have found a temperature in my mouth or in the axilla—and I think I am a fairly healthy specimen; always felt so, at least—but I have never got my temperature above 98., but usually about 97.8, and even a little lower than that in the morning. As Dr. Munn has stated, it would be a very important fact to me to know at what time the temperatures were taken. There is at times a variation of temperatures in almost every individual, as the doctor stated. The morning temperature will very seldom register above 98; and a temperature that does register above 98 in the morning will probably register 99 in the afternoon. There is that diurnal variation in almost every individual, beginning perhaps with a minimum in the early morning about four or five, and gradually climbing up the scale until perhaps eleven o'clock, when probably it will be stationary until two or three, and then make another little rise in the afternoon toward the early evening; and then gradually decline. So in taking a temperature, I do not feel I that have a sub-normal temperature unless I have something to alarm me in other respects. I hardly consider it sub-normal if it is not below 97.6—a full degree below what is ordinarily marked on the clinical thermometer as normal. A half a degree or a degree above this point in many individuals will occur every day. I had occasion, I know, at one time, to take the temperature of half a dozen people around the bedside, of a patient I was very much interested in, from the fact that this patient's temperature ran about 99½ in the afternoon. So I took the temperature of a trained nurse, the mother of this young woman, and then of her sister, and then my own temperature. It ranged from 97.8 to 99.6, and the trained nurse's and the sister's temperature was a little higher than the patient's. And in after years this same individual showed a little rise in temperature—that is, above normal—in the afternoon, the normal being in the morning.

DR. WELSH, (Hutchinson): Mr. President, I have noticed for several years past in hospital work, especially in surgical cases, a few days after the operation the temperature drops to what we call normal. We always find it in the morning from 97 to 97.5, and then in the afternoon or evening, when the

temperature is taken about four or five o'clock, it will run up to 98 or 98.4 .5 or .6 or something like that. That is what we consider normal, if it runs 99, or if it is a little over 99 then we think we have a little fever. But almost invariably the temperature in the morning is below 98. About six o'clock the night nurse takes the temperature, before she goes off duty, I think in almost all cases it would be considered normal from 97 to 97½ at that time. We consider that a normal temperature.

DR. R. C. LOWMAN, (Kansas City): We become accustomed to finding it from two-thirds to a whole degree of variation in perfectly healthy individuals, until I have gotten to think nothing about it. We so seldom take the temperature of healthy individuals. It is nearly always someone who is a patient. But in making insurance examinations we find it is nothing uncommon to find a temperature below 98.3, and I pay no attention to it; but if it goes above 99, then it does occasion some question as to the patient's condition. But I did have one case of typhoid fever that did attract considerable attention in our town, and I will say, by the way, that this patient had all the phenomena of typhoid, and a positive wiedal reaction, and no question in diagnosing the case; but the temperature in the evening was almost invariably 96, and in the morning it would be up to or above normal; just the opposite from what we would expect. I could not tell just what was the cause, but there was not a single exception in a little over three weeks that he was sick that the temperature did not go down below normal in the evening. I would like to know if anyone else has had an experience of that kind with typhoid patients.

DR. BOLTON, (Iola): Mr. President, I think one point should be mentioned that physicians in taking temperature are liable to be misled. We have one minute thermometers, but I do not take any stock in these thermometers at all. In practical experience I have found it absolutely necessary to be sure, to leave the thermometer in the mouth five minutes at least. I have taken temperatures repeatedly in the ordinary way, and found them to run up each time from one-half to two degrees, and in continual trials I would find the thermometer would finally register properly. The gentleman was speaking about typhoid fever. I just recently had a case where I began to suspect typhoid. A woman about 60 or 65 years of age, and I found her several times with a normal temperature in the morning, with a fever running up to 103 or 104 in the afternoon, the next morning normal, and then in the afternoon no fever at all; the first thing I knew she had a severe hemorrhage. This was the only diagnostic point I had on which to conclude it was typhoid fever.

DR. E. E. HUBBARD, (Shawnee): I had always supposed temperature was lower in the morning in either sickness or health than in the evening. We all know in cases of acute sickness, where there has been any temperature to any extent whatever, the temperature many times goes below normal during convalescence, or in the beginning of convalescence. I can philosophize in my own mind that the temperature would be sub-normal after any excitement or sickness of any degree, simply from the fact that the heat centers are more or less exhausted; that there is more or less exhaustion of metabolism, and that especially in the healthy individual metabolism is at its lowest, and the temperature naturally runs down during the night and will be lower in the morning; and that during the afternoon and evening of a day, more or less strenuous, perhaps it would necessarily be high because of the increased metabolism, and the increased elimination of waste, and it would necessarily produce temperature to destroy waste material. And as to degrees of temperature in case of convalescence, I understood the doctor to say in his paper that many of his cases came to him with sub-normal temperature after the height of the temperature had passed. It would seem to me, at least I had always supposed, that it was perfectly natural and absolutely necessary that this hypothermia should follow an excessive or long continued hyperthermia.

DR. CHAMBERS, (Closing): Mr. President, the last speaker has said that he supposed the fall in temperature in some special cases following abdominal operations is natural. Let me disclaim any intention of teaching that there is anything unnatural or supernatural in disease and the conditions that go with disease or in the variations that are not called disease. The phenomena of disease are doubtless as natural as those of health. I

am simply interested, and I hope to interest you, in getting an understanding of the *modus operandi* of this variation in temperature. Two of the cases reported showed the sub-normal temperature resulting from psychological depression as mentioned by Dr. Perry. The laparotomy cases mentioned by Dr. Munn and other surgeons seem to me to be examples of hypothermia due to combinations of the causes mentioned in the body of the paper. Thus: they all suffered more or less trauma to the peritonæum, they all had more or less bacteria and bacterial toxins to care for, even though not so many as to be called "infected", many of them were infected cases (presumably at least), they all lost more or less blood, and there were also the factors of starvation and purging applying to some members of the group.

Let me suggest that a closer observation and study of the temperature might show more variation even in health than we have been accustomed to think. We already allow considerable variation in both the relative and absolute size of the different members of the body, in the amount, specific gravity and other characteristics of the secretions and of the excretions, in the number and composition of the blood cells, and in the rates of respiration and heart beat and consider all perfectly natural if not normal. May we not then reasonably expect more or less variation in the temperature and will it not be profitable to get a working knowledge of the causes of these variations. I thank you, gentlemen, for the interest you have shown in my paper.

SEPTIC ENDOMETRITIS WITH REPORT OF A CASE.

DR. H. H. BROOKHART, Scammon.

Read before the Southeast Kansas Medical Society, April 11, 1911.

Septic Endometritis.—An inflammation of the endometrium due to septic micro-organism, especially the staphylococcus, and the streptococcus, invading the corporeal endometrium. The chief causes are, infection following labor or abortion, intrauterine office treatment, the use of the uterine sound, sloughing uterine tumors. The post-puerperal infection is the most frequent cause of this disease; very often caused by careless midwifery, and again, it may occur when we have used the greatest care to avoid sepsis, the infection having taken place before the arrival of the physician.

Septic endometritis following spontaneous and criminal abortions, is so frequent that we are all more or less familiar with the condition. In the spontaneous variety we are very liable to have a small particle of retained membrane, which is not recognized until the infection has occurred. In the induced or criminal abortion, I think we always have an endometritis to a greater or less extent. The cases that have come under my care there has always been found an elevation of temperature.

The intrauterine office treatment, or local applications to the endometrium at the physician's office or patient's home, is dangerous, and septic infection is eventually certain to result, if practice is persisted in, as the intrauterine application of altera-

tives and sedatives are useless as therapeutic measures; they should never be used.

The uterine sound when used without proper sterilizing it and the vagina, is very prone to cause septic endometritis.

Sometimes sloughing occurs in uterine polypus, or in the inverted portion of the uterus in cases of inversion, and unless prompt operative measures are adopted septic endometritis is likely to result, which may be followed by tubal involvement.

Septic endometritis may be either acute or chronic in character, or more correctly the acute passes into the chronic stage.

From a clinical standpoint septicemia is divided into two forms: Septic intoxication (sapremia or putrid intoxication), the absorption into the blood of ptomaines, and septic infection, which is caused by the absorption of bacteria into the blood where they multiply rapidly and produce constitutional symptoms.

In septic intoxication the gravity of the symptoms depends upon the quantity of toxins absorbed into the blood, the symptoms usually manifest themselves within twenty-four to forty-eight hours after intrauterine infection, ushered in by a severe chill, followed by high temperature and a rapid pulse, if this infection has followed labor the lochial discharge is in a few hours diminished or temporarily suppressed, but soon returns and is very dark in color and purulent in character with offensive odor. The patient suffers almost from the beginning with intermittent uterine pains which soon become continuous and very acute. As the disease advances all the symptoms become exaggerated, the chills recur irregularly, the temperature may go as high as 106... F., the pulse is weak and rapid, the urine is diminished in quantity or suppressed entirely.

In septic infection the gravity of the disease and the severity of the symptoms depend on the rapidity the bacteria increase in the blood. The symptoms usually manifest themselves in four to seven days after the invasion of the bacteria, the first symptoms are fever and a rapid pulse; sometimes there is a chill early but usually it is late in the disease; the temperature curve is very irregular, and some times has the typhoidal curve. As the disease advances gastrointestinal disturbances present themselves, vomiting and diarrœhea with profound exhaustion.

Chronic variety, when the acute form is not controlled early or death does not occur. The symptoms gradually subside and the disease becomes chronic in character, the symptoms in chief being then leukorrhea, hemorrhage, menstrual disturbances, pain, sterility, or abortion if impregnation does not take

place. Physical signs show slightly enlarged uterus, its body somewhat rounded, the consistency of the entire organ is softer than normal, the vagina is bathed with a purulent discharge, the pain is not great on bimanual examination unless the appendages are involved. Diphtheritic deposits or gangrenous areas may sometimes be seen on vagina or cervix, or the cervix is eroded, and presents an angry and inflamed appearance. In the severe acute cases the disease usually extends and involves the uterine appendages and often all the pelvic viscera. The prognosis is always grave. My experience is that few women fully recover after a severe attack.

Treatment.—The disease begins as local conditions, the early treatment should be directed to the endometrium. In septic cases following labor and abortion, the irrigation of uterus two to four times a day with a one or two thousand bichloride solution; if any suspicion of retained membranes the irrigating current should be used, and constitutional treatment as symptoms demand. Will give treatment as used under report of case.

On the night of June 1, 1910, I was called to see Mrs. E., mother of one child now eleven years old; the labor was normal, she had two miscarriages since and her health has generally been good. I found her suffering with pain in uterus, pulse rapid, temperature normal. She said she had gone over her monthly period four days, but had flowed a little that day. I gave her $\frac{1}{4}$ grain codeia to be taken every two hours, if necessary, to control pain. Hot applications over the sight of pain, a saline to be given the following morning. The next afternoon she was feeling some better, but still had some pain; the flow was fairly good, some small clots had passed, pulse was almost normal and temperature 99... F.

On the 6th of June Dr. W. H. Iliff was called; I was out of town attending the A. M. of A., at St. Louis, she had a chill, temperature was 102° F., pain quite severe in pelvis. There was a slight mucopurulent discharge. A hot antiseptic vaginal douche was given and drugs to control symptoms. On the 12th of June there being no improvement, she was anesthetised, uterus dilated and curetted; this was followed by irrigation with 1 to 2 thousand bichloride; the irrigation was repeated twice daily until the 17th, when it was discontinued, the symptoms having improved. During this time she had been bothered with stubborn constipation, and suppressed urine, diuretics and salines had to be given in large quantities. Quinine, calcium sulphide and echinacea were given for general infection.

On the 20th I again saw her. Her condition had grown

worse. Two hours before I saw her she had had a severe chill; I found her with a temperature of $103\frac{3}{8}$ F., pulse 130, bowels tympanitic, a slight muco-purulent discharge. A bulging of culdesac into vagina. I gave a hot uterine douche, but it seemed to aggravate the symptoms. Had a chill in less than an hour, temperature going to $104\frac{1}{2}$; on the 21st the temperature ranged between 102 and 106; she had three chills, the pulse was rapid and weak. Gave digatalin and strychnine to support the heart, and one grain of echinacea every two hours with two grains quinine every four hours. Alternated with hot and cold packs to control the temperature and keep off chill.

By evening of June 23rd, the bulging in culdesac had obliterated it. I decided on the following morning to drain through the culdesac, but during the night of the 23rd there was a rupture into the bowel; a quantity of purulent matter was passed at stool. This drainage continued for some days, the patient began to improve but would relapse every four or five days; the skin remained yellow, the breath fetid. Her appetite remained fairly good through it all, she would take a considerable quantity of butter-milk and broth.

By July 12th her condition justifying it, I removed her to the hospital at Pittsburg, and on the 13th I assisted Dr. C. A. Smith with laparotomy. The right tube had abscessed and ruptured, there was quite a quantity of bloody pus in pelvis which we sponged out; we removed the right tube also right ovary which was cystic. The left ovary and tube being in fair condition was not disturbed. Put in rubber drainage tube with wick to bottom of wound and closed. Patient in fair condition. The next morning the temperature was 103, pulse 140, urine very scant. There was quite free drainage from wound. The urinary conditions cleared up in two days with aid of benzoic acid, salol and lithia, the temperature gradually subsiding. She left the hospital on July 29th the 16th day after the operation, and in six weeks was able to do all her own house work.

The infection in this case was from the time-honored hard rubber catheter, she having missed a few days, thought it would bring on her changes by passage of catheter.

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MEDICAL JURISPRUDENCE.

HON. JOHN H. CONNAUGHTON, Kingman, Kansas.

Read before the Kingman County Medical Society, March 9, 1911.

It is not the intention of this discourse to prepare a con-

densed treatise on Medical Jurisprudence, but rather to review a little of its history in an entertaining way. To define it and show its connection with law and medicine; to rehearse its history and illustrate its growth by means of examples; and in this connection discuss its use in the present day. We shall also add to this a brief discussion of expert testimony which is a part of medical jurisprudence; and lastly the benefits of its principles and possibly some of its faults and causes, and with a short conclusion of the whole matter.

Medical jurisprudence has been aptly defined by one writer as "a sort of mixed science, which may be considered as a common ground to the practitioners both of law and medicine." This is the definition of Stephen in his commentary. It is otherwise called, "forensic medicine", that is belonging to courts of justice. Black, probably the greatest of American legal writers, defines it as follows, "The science which applies the principles and practice of the different branches of medicine to the elucidation of doubtful questions in a court of justice." It is therefore a branch of that part of the law which deals with the administration of justice, rather than of that branch which defines duties, rights and liabilities.

Although this subject has many times been confused with that division of law known in the books as "Physicians and Surgeons", and which subject treats of the rights, duties and liabilities of physicians and surgeons, yet the two are absolutely distinct and have no connection whatever. They belong to two different and widely divergent branches of the law and should not be confused. Their difference is as distinct as the division between adjective and substantive law, to each of which subjects they belong, respectively.

Medical jurisprudence does not deal with the rights, duties and liabilities of individuals, only as it slightly touches this subject in aiding in administering the law in courts of justice. It does not establish or define the relation of individuals to each other, but rather aids in adjusting differences between individuals, when there has been an invasion of the rights of another.

In order to make this distinction more plain, it might be well to define adjective and substantive law. Adjective law is the aggregate of rules of procedure or practice, as opposed to that great body of law which courts are established to administer; it means the rules according to which the substantive law is administered. It is that part of law which provides a method for enforcing or

maintaining rights or obtaining redress for their invasion Quoting Black Law Dictionary, page 37. Substantive law is defined as the opposite of that above. That part of the law which defines and regulates rights. Black Law Dictionary, page 1132. Then if we turn again to our definition of medical jurisprudence, we will see that it belongs to that branch of the law which is termed adjective law; and that being the case has nothing to do with the rights, duties and liabilities of physicians and surgeons, only as it might help to adjust them in a court of justice.

It is rather that science which has been established by necessity herself, "that great mother of invention" the purpose of which is to aid the courts of the land in arriving at the right conclusion. It defines the right of no person, but rather helps him to redress a wrong committed; it determines the liability of no person but rather aids in adjusting the liability after the natural rights of persons have been transgressed. If the right of no one, as laid down by the great body of substantive law, were violated by his fellow men, medical jurisprudence would lie dormant and sink into oblivion. It is only when man in his infirmity forgets or neglects the rights of his brother that it becomes necessary to study medical jurisprudence, and then only for the purpose of relegating the individuals concerned to their former status as near as possible, when it is again forgotten.

As we have before said, medical jurisprudence, as well as all other laws is the outgrowth of necessity. The laws written on our statute books forbidding murder were only necessary because of the transgression of man. When Cain arose in wrath and slew his brother Able, he laid the foundation for our criminal law. Which criminal law exists regardless of statute. Then as others took the lives of their fellow beings, it became necessary for some kind of an adjudication to determine who the guilty person was and the magnitude of his crime; and we need only to refer to ancient history both sacred and profane, to see the crudity of the ancient trials and rules of adjective law. And as time went on, humanity not only transgressed the rights of his brother in the way of taking life, but they encroached on one another's rights in other ways, which did not affect society in general. And there also grew up laws touching the rights of individuals as against individual. In this way the great body of our law has been established. Starting first in a method of custom, which from repeated use ripened into law, and which we denominate the unwritten or common law. To this branch of the law also belongs medical jurisprudence. In the course of adjudications there arose

questions which required the testimony of men skilled in the study of the human body, and they were called as witnesses to describe the conditions surrounding the act complained of, whether a crime or a suit for damages. And then came the necessity of explaining to the triers of fact the effect on the person of certain acts; and also, whether a certain wrong complained of, would result in a permanent injury or be only temporary in its effect; or whether blood found in a certain place in connection with a murder, was human blood or not; and countless other questions which would throw light on the case, and which by their nature, men who had not made these questions a study, would not be able to solve. And thus medical jurisprudence, which originated by reason of necessity, has grown to what it is to-day.

The development of medical jurisprudence has been extended over a great many centuries, and its advancement is co-extensive with the march of development of law and medicine. As these two separate sciences have been advanced, the natural desire of mankind to have justice done in courts of law, has led to new rules in medical jurisprudence, which further aided in arriving at the proper conclusion. As we have said before, doctors, were first called much for the same purpose as any other witness, that is to tell his story from the same point of view as any other witness. Later he was allowed to describe the condition of the body and of any wounds thereon, and finally to describe symptoms of an injured or dying man, the effect of blows on different parts of the body, stabs, cuts, bruises, and whether permanent or temporary; the effect of different drugs and poisons, etc. Thus through a long stage of development, prompted by necessity, it has reached its present state. It was seen during the process of development that to limit the physician to testifying the same as any other person, would often times cause a miscarriage of justice. A man might be struck by another an insignificant blow on the head, and when the other man died the same day of apoplexy or some other sudden cause disconnected from the blow, be charged with murder. If the persons who saw the blow were allowed to testify as to the striking, which would be according to the rules of evidence, and others to testify as to the death of the other party suddenly, and no physician be allowed to give his medical testimony as to the effect of the blow on the head and the real cause of death, it is not an impossible conjecture to say that the man might be convicted of murder. But when a physician takes the witness stand and testifies that the blow on the head was not of sufficient force to produce death, and in fact produced no injury

at all but was simply a harmless slap, and then further explains the real cause of the death, the jury cannot do otherwise but find him not guilty. Or a person exercising due diligence and care, being in a secluded spot, thinking no one was near might fire a shot at an iron post or other hard substance, and the bullet strike the obstacle and glance and hit some person near and inflict a serious wound; the consequence would be a charge of assault with intent to kill. And many times the outcome would be a conviction of the party firing the shot, if it were not for the physician who attended the wounded man taking the witness stand and describing the direction the bullet took after entering the body, the appearance of the wound and other circumstances connected with the wound, which shows conclusively that the gun when fired could not have been pointed at the injured person and hence this was a mere accident for which no one is responsible. The testimony of a witness that he was seen to point the gun before the shot and the other to fall, might make a prima facie case, were it not for the medical jurisprudence.

It originated by reason of a demand to do more adequate justice, and has grown as the science of law and medicine have grown. And it is to be expected that its future development will keep apace with those two sciences, of which it has been aptly said it is the middle or common ground, for lawyers and doctors, vulgarly speaking, or as we would desire to be called, physicians and surgeons and attorneys at law.

But the part of the subject which interests us most is the use of the science at the present time. Of course it goes without saying that medical jurisprudence is not called into action unless there is a case involving some kind of an injury to a person. The most common of which are criminal cases of different kinds. But, not infrequently are physicians and surgeons called as witnesses in cases brought for the recovery of damages, where the cause of action is a physical injury. And I believe that we can with profit to both of us, review for a short space of time, these two phases of this science.

Referring to criminal cases, one of the common reasons for calling a physician is where there has been a mysterious death, and he has performed a post-mortem examination, in order to determine the cause, and thus leading to a discovery of whether the death was accidental, self-inflicted, or a homicide. If there have been wounds made on the body of the victim, the physician making the examination will be able to determine whether made by a cutting, pointed or rounded instrument. Or if by bullet, the

direction the ball took after entering the body and then by course of deduction, it may be ascertained the direction from whence it came. In short the physician making the examination may be able to give such definite information as a result of the examination that will enable a jury to say with certainty, the cause of death, whether suicidal or homicidal, and give circumstances that will point almost directly to the guilty party.

Another subject which has engaged medical jurisprudence is that of identity. Identity as applied to a living person and one sought to be connected with a crime and the identity of a dead person. And as it is important that a person charged with crime be identified with the person who actually is known to have committed it, it is even more important that the body of the person be found and identified in order to establish, what is known in law as the *corpus delicti*. And as is said in the books, the identity of a living person is often hard to establish, and that of the dead proportionally greater. And for this reason it is necessary to call on those skilled in that matter to aid a court in this determination. In regard to the living a great many rules might be put forth by any of us that would work in ordinary cases, yet the extraordinary cases that arise call for the services of our veteran skilled in medicine and the study of the human body. And accordingly several rules have been laid down for that purpose, that of identity with a previous photograph; anthropometric markings, and personal markings. And in addition to these circumstances surrounding a particular case may lead to the identity of the person charged with the crime. If he is insane his actions in regard to the perpetration of the crime or the disposition of the remains afterward, may point to some peculiarity of the person, that would be easily recognized. Or though he is not insane his acts and disposition may easily identify him as the perpetrator of the crime, by reason of some hobby or natural peculiarity.

Now in regard to the *corpus delicti*; it is not enough to show that a person is absent, but there must be a proof of his actual death, and in a good many cases it must be by some one having seen his body or portions thereof after death; and only in cases where the presumption is very great will this be dispensed with. For example, if a person were seen to go into a building with another which was known to be empty, and that other seen in a few minutes to come out, and the building be burned down immediately following, and in the ashes a few charred bones be found, the proof of *corpus delicti* might be discarded, but there are cases to the contrary, holding it absolutely necessary in all

events to prove the corpus delicti. It has even been held that a confession unless absolutely free and voluntary would not even supply the lack. The reason for this is quoted in the case of a man who confessed to killing his servant and putting him in a pond and the body had not been found. His guilt seemed certain, when the supposed dead person put in his appearance and exploded the whole matter. The reason for this is evident, a person charged with crime might become temporarily deranged by reason of worry, and thus confess something not done. We also recall a case in New Hampshire, where two boys by reason of excitement and fear confessed to the murder of a brother-in-law with whom they had quarrelled; after being confined in jail pending an appeal on the legality of their confession, they advertised for their missing brother-in-law and he put in an appearance and thus demonstrated their innocence even after confession. And numerous other cases might be cited. So for this reason the law has asked for the absolute proof of the corpus delicti. For this purpose, physicians and surgeons are frequently called to identify or determine whether certain bones are human or not; and in this connection a case is cited where this was done the bones identified as human and the corpus delicti established by the finding of a buckle and button in connection therewith which were known to belong to the deceased. Aid might be had by determining the size of a skeleton, the length of time buried, the character of the material in which interred, the determination of age, which might be determined with some degree of certainty by the state of development of bones, of teeth, etc., the sex of the deceased, which is said in the books to be easier than the others herein mentioned; if there be any peculiarities or deformities known to have existed in the person during life time, it can be easily determined whether it be same person after death. A study of these principles would be absolutely necessary were a case presented where the skeleton only were found.

Then the physician or surgeon is often called upon to identify human bodies which are not entirely decomposed, or which after an attempted destruction, parts of the same remain. The proof on this point varies owing to the size and number of the parts not destroyed, the length of time after death, the means used to destroy, and a number of other things might enter in to vary the case. But one recent illustration will bring this point out clear, and that is the recent Crippen case in England. In that case the great task of the Crown was to prove the corpus delicti. To do this they produced only a few small portions of flesh and one of them

covered with a bit of skin in which there was a scar or a fold according to the side interpreting it. On the trial it was proven to the satisfaction of the jury, that the piece of flesh with the skin thereon containing the scar was that of the dead wife of said Crippen, it having been proven to their satisfaction beyond a reasonable doubt that a scar described upon her body was that on the produced piece of flesh. Other examples might be given without number.

The time of death, the wounds upon the body, whether with blunt or sharp instruments, etc., have also been the subject of present day medical jurisprudence. It often becomes material as to when or about how far distant in the past the death of a person has taken place in order to determine whether a certain person is responsible for it. This, no one but a physician and surgeon would be able to determine and hence the only competent witness. This, if within a few days, may be determined by investigation as to whether putrefaction has appeared; whether there is cadaveric rigidity, or whether the body is entirely cold or not.

Or possibly there are a number of other methods which I have not named, but these will serve to illustrate the point. But it can be easily seen that a physician might be able to settle the time, approximately of the death of a person in question, and thus set free an innocent man and aid in securing the guilty.

To go on through a greater number of illustrations of present day use of medical jurisprudence, whether in civil or criminal cases, would be a useless waste of time, as those we have given serve to illustrate what it means to us in the present day. We of both professions owe ourselves the duty of a close study of this common ground between us, that we may be best fitted to aid in the solution of doubtful cases; and with the further idea in view that we meet in the Court room not as antagonists, but as professional men each recognizing that the other has rights which we are bound to respect.

There remains but one other portion of medical jurisprudence, that I desire to touch upon, and that is what is known as expert testimony. Expert testimony is not confined to physicians and surgeons alone, it applies to every vocation in life. There is never a case tried in Court, I might say, but what presents questions that are peculiarly within the knowledge of persons following certain professions or callings in life. A farmer may be able to testify as to the age of a horse because of his peculiar knowledge that you and I may not have. To that extent he is an expert witness. A nursery man may be able to tell the age of a fruit

tree by reason of the same fact; to that extent he is an expert witness. The only importance that can be thrown around the medical man as an expert witness is the scarcity of that kind of witnesses. The same might be said, probably with less degree of lawyers. A man becomes important as an expert witness when he is, using a slang phrase, "few and far between."

As an expert witness, it is necessary for the physician to qualify himself by giving his medical training, the school he attended, the number of years of practice and his age, also his knowledge of cases like those in issue. After this he is free to give his testimony as an expert on medical questions. And it might be said right here, that it would be necessary for him to qualify as an expert in order to testify on any subject covered by medical jurisprudence. But expert testimony is a distinct portion of medical jurisprudence.

The physician sitting as an expert witness in addition to testifying to the other matters herein set out, would be allowed to state whether a wound which has been proven of a certain kind, would be made by striking from behind, to one side or in front. He would also be allowed to state the position of the head, neck or arm or another part of the body with relation to the striking person. He would be allowed to state what kind of an instrument was used, whether sharp, blunt or round. In a damage suit, he would be allowed to state whether a certain injury would be painful or otherwise; whether the injury would be permanent or temporary; whether a hand or foot would be shorter than the other, etc. He would also be allowed to relate to the jury what proper treatment in a certain case would be in order for the jury to compare it with that given, and say whether due care was used to prevent further injury, where a defense of contributory negligence was set up. And he would also be allowed to answer hypothetical questions covering a set of facts stated in the question. Such questions should be watched closely and distinguished from the state of facts as involved as the witness understands them. A questioner is never allowed to say assuming the facts as proven here what would you say is the result of a certain action. But should rather be worded as follows: "Assuming that A was wounded in the lower abdomen, just below the waist line, by a leaden ball fired from a 44 colts revolver, and that the bullet was found in the lower pelvic regions near the spinal column, the point of entrance being about one and one-half inches above and a little to the right of the naval, what in your opinion would have been the relative position of the person firing the said shot with regard

to the injured person, assuming that the bullet struck nothing until it entered the body of the injured man." When such a question is asked, it is the physicians privilege as well as his duty to himself and all concerned, that he understands it perfectly before answering it; and if enough hypothetical facts are not included in the question to aid him in giving an intelligent answer, say so and if necessary, state in what particular the question is lacking. But never state where lacking unless it is necessary to do so to keep in good repute before the court and jury. It is the duty of the examiner to find out these things himself and do not aid him in it, unless your own counsel is examining, when if you see he is off it might be advisable to put him right, as you can easily do so without being subject to censure. In the above suggestion question you might if necessary to give an intelligent answer say, "I cannot exactly state unless you locate more exactly the place where the bullet was found." But as I have said before do not do so unless it is necessary.

Expert testimony is a very important branch of our American jurisprudence today, and while it in a sense is a branch of medical jurisprudence, yet it within itself comprises medical jurisprudence; but is always treated as a branch of it. But the fact is no one can testify on subjects covered by medical jurisprudence, unless he is able to qualify as a medical expert.

Taken all in all medical jurisprudence is a very important science for both the medical man and the lawyer. Both must have a good understanding of it in order to conduct their side of the drama when called upon. The lawyer always playing the role of questioner and the medical man of answering the questions. And I have found that a questioner must necessarily understand the subject about which he is talking fully as well as the man who is answering the questions or he will leave out a number of things he desires to bring out.

We should also, when we meet one another on the broad common battle ground of medical jurisprudence, do so with a feeling of good will toward one another, and not with a feeling of antagonism, the one seeking to overcome and worry the other, but treat each other civilly. I have found that it is most advisable where a medical man has taken the stand and told all there is to be told about a case, he being an adverse witness, to let him go without cross-examination. If he is cross-examined at all, only for the purpose of getting statements that could be made without being in variance to what he has already said, and which are good for my side of the case. If his testimony is damaging, any cross-

examination will only serve the purpose of having him repeat it to the jury and thus work an injury rather than a good. If he knows facts that will do me good then it is better to call him as a witness in my own behalf when an opportunity is presented, rather than to cross-examine. Cross examination is a poor implement except for the purpose of catching a man in a deliberate falsehood, and as medical men like lawyers are honest, I deem it better to let them go without it.

But seriously, medical jurisprudence is an interesting science and any of us will do well to give it a great deal of attention.

And we might say in conclusion, that the high regard that medical jurisprudence should have in the minds of men, depends upon the way it is administered by us of the two common professions of which it is concerned with. If we use it for the purpose for which intended, as Black says, "the elucidation of doubtful questions of fact", and not for the entanglement of courts and juries, it will have its rightful place in our system of jurisprudence.

The witness, who might hew one iota away from the line of truth for any reason and the attorney who would be a party to such a piece of dishonesty, should be condemned and ostracized alike by honorable men of both professions. If expert testimony can be bought and sold to prove the sanity or insanity of a party charged with crime, or testimony of any kind be bartered, which belongs to the subject of medical jurisprudence, it will breed a contempt for that science which has heretofore been an aid, and it will become a hindrance. It will descend to the level of a mere sham instead of a science, and as a natural result will drag us of its two common professions.

But I am not inclined to be pessimistic. I believe that the world is growing better and its creatures wiser. I believe that our system of jurisprudence is getting better; that justice is more often done, than injustice; that witnesses, as a rule try to tell the truth, although frail humanity is prone to color its story for its own good. And I am charitable enough to believe that it is this frailty which sometimes leads one to think a person has perjured himself, and not a natural desire to willfully testify falsely. That it is rather an error in judgment prompted by too great an anxiety to serve self or friends. And I believe that medical jurisprudence is in a higher state of perfection than ever before; and that the men who make up its two honored professions are seeing that it keeps its rightful place; and that they are seeking to be an honor to their separate callings. For this reason, I believe no one needs fear but what the high standard of medical jurisprudence will be maintained.

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EDITORIAL

Some people acquire knowledge without realizing it, while some realize they have it, when in fact it is in the mist miles away.

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"If a man can write a better book, preach a better sermon, or make a better mouse-trap than his neighbor, though he builds his house in the woods, the world will make a beaten path to his door."—Ralph Waldo Emerson.

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The President has completely vindicated Dr. H. W. Wiley of any wrong doing in his department and exonerated him from any technical violation of the statutes with which he was charged. Mr. Taft's suggestion of the need of a cleaning up in the department will probably be followed by a "shake-up" which will mean less antagonism to Dr. Wiley's efforts to enforce the pure food and drug laws. The president's decision meets with the approval of the people of course, but not the interests who were given a body blow that they will not soon forget.

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The time will soon arrive for the election of State Senators and Representatives. Are we going to sit idly by and watch the formation of this legislative body without taking a part in its selection. We have heretofore waited until the legislature con-

vened and then have tried to get passed various bills for the good of the state, only to see them die an ignoble death. We have also seen bills enacted by the irregulars which are a constant menace to the people of the state, and incidently have been powerless to prevent it. Now comes the "Chiropractors" who according to a Kansas City daily paper have formed an organization and employed attorneys to help get recognition from the state of Kansas.

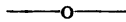
WICHITA, KAS., Aug. 31—A state organization of drugless doctors formed here today with a membership of 100. The name of the association is the Kansas Drugless Doctors' Association. The delegates declare that a medical trust exists in this state which is crushing out all forms of treating disease that do not meet their approval.

O. W. Brewington, a suggestive therapist, was elected president; J. S. Wilson, a chiropractor, secretary, and Dr. Ira B. Philips, treasurer, all of Wichita. An executive committee of three drugless doctors was elected. J. W. Cotner, a suggestive therapist of Lebanon, who has been arrested several times for practicing his profession; F. E. Preston, a "chiro" of Salina, and Peter Hittle a magnetic healer of this city make up the committee.

A constitution providing for an association government similar to the commission form was proposed by Colonel S. L. Long and accepted. The purpose of the organization is to secure legislation which will permit the members to practice their profession in Kansas. Attorneys have been hired to represent the association in its fight.

Perhaps they will have to wait until the next legislature convenes before they get any encouragement because our State Board has put its stamp of disapproval upon these self styled "practitioners."

Now unless we can get elected a few at least of the legislators, who will not be swayed by the arguments that these irregulars advance we can not hope to have any standard for the practice of medicine in our state. We must *get busy*, fight fire with fire. It would certainly be a fine thing if the legislature could be made up with the same proportion of doctors that there are lawyers, farmers, etc., then legislation that is necessary for the prevention of disease as well as laws elevating the practice of medicine, instead of lowering it would be an accomplished fact in place of an irredecent dream.



Dr. William A. Evans, formerly health commissioner of Chicago, is conducting a department of public health daily in the Chicago Tribune. This department is devoted to the dissemination of information on how to live and keep well. A great deal of good can be accomplished in this field and in this way. The prevention of disease is attracting the attention of the laity more than ever before and with the judicious use of plain language understood by all a great deal can be accomplished. How

to reach the public with information along these lines has always been the stumbling block in preventative medicine, and this innovation by a paper of the Tribune's standard is the right thing at the right time.

The Ninth Annual Summary of Fourth of July Injuries compiled by the Journal of the A. M. A., for 1911, shows a remarkable decrease in the number of cases of tetanus since 1903. For instance in 1903 there were 415 cases, and for 1911 only 18 cases. Of these 10 or 55 per cent ended fatally, as compared with last year of 72 cases, 93 per cent, were fatal.

Besides the 10 deaths due to tetanus, 47 persons were killed by various forms of fireworks, making a total of 57 deaths, 74 less than last year and 158 less than in 1909. This goes to show how much waste of human life has been going on and is a fine argument for a "sane fourth." It also goes to show that the treatment of these cases has been vastly improved upon both as to prevention of tetanus and its cure.

In the District Court of Smith County, Judge R. M. Pickler presiding, John M. Peters was convicted of practicing medicine without a license. Peters claimed to be a graduate of the Weltner Institute of Therapeutics. He had been arrested several times during the past few months, by Dr. H. A. Dykes, Secretary of the Medical Board of Registration and Examination. He was defended by the best attorneys that money could procure. The State was represented by the local County Attorney of Smith County, and Judge F. L. Martin of Hutchison, who is the attorney for the State Board. This was a test case on Suggestive Therapeutics, and that the State won out is certainly a great victory to the profession of this State, who are making a fight to see that those engaged in the practice of medicine are qualified by education and experience, to follow this profession.

This demonstrates another thing, that our present law now on the statute books, which was amended in 1908, is absolutely good, and is so held by Judge Pickler and the Supreme Court. All that the old law needed was the insertion of the words "treat or attempt to treat" and the Judge's instruction to the jury was that the practice of medicine in its broad or statutory sense, does not mean the administration of drugs alone. That if the defendant treated by drugs or suggestive therapeutics, without a license, he was guilty of violating the law, and it was their duty to convict him. Judge Martin, attorney for the Board, certainly deserves much credit for the manner in which he prosecuted this

case, as well as the recent one in Stafford County, and in the prosecution of those cases I think that the State should bear part of the expense of such amount as can be economically used. It seems to me it would be a stimulus to the County Societies to push these cases, if they knew that the State Society would furnish some substantial support.

Dr. H. A. Dykes has worked untiringly in attempting to stamp out the illegal practitioners and he deserves the hearty support and co-operation of every member of our Society, and I think he should have the unanimous support of every member of the Society, for his re-appointment on the Board.—C. S. H.

The Journal of the American Medical Association is publishing the testimony of the "Wiley Investigation" before the Congressional Committee.

Although it is hardly necessary to do so to vindicate Dr. Wiley in the eyes of the profession, still it is mighty interesting reading, and gives an insight into the workings of the department which has been heretofore unknown to the public. It shows beyond all peradventure of doubt that some of the members of the department have done everything in their power to curtail Dr. Wiley's work in the enforcement of the Pure Food and Drugs law. It is to be hoped that President Taft will clean up this department in a way that will help Dr. Wiley in his fight in place of antagonizing him.

SOCIETY NOTES.

The Barber County Medical Society met at Medicine Lodge, July 27, Papers were read by Dr. Stallard of Hazelton and Dr. Coffee of Hardner, which were freely discussed. A resolution condemning the candidacy of Mr. Arthur Capper for Governor was passed.

Sumner County Medical Society met in special session with Drs. H. G. and S. T. Shelly, in Mulvane, Thursday evening, August 24th. Some thirty Sedgwick county members accepted the invitation, making the meeting a hummer. Refreshments were served by the Mulvane fraternity.

The following program received a full discussion:

Report of a Case of Diabetes Mellitus, Dr. Walter Rea, Oxford; Toxemias of Pregnancy, Dr. J. D. Clark, Wichita; A Probable Cause of Difficult Labor, Dr. R. H. Sheppy, Peck.

The Western Kansas Tri-County, Decatur-Norton County Medical Societies held a meeting at Colby, Kansas, September 21, 1911. The following program was given.

Paper, F. E. Gaither; Case Report, "Premature Detachment of the Placenta", C. S. Kenney; Discussion, E. J. Beckner, F. A. Hall; Dyspnea, S. B. Koory, Discussion, W. H. Pope L. C. Tilden; Paper, F. R. Funk; "The Need of Medical Organization, I. B. Parker; Discussion, F. A. Carmichael, E. D. Beckner; "Some Needed Medical Legislation, F. H. Smith; discussion, W. C. Lathrop, H. O. Hardesty.

The North-east Kansas Medical Society will meet at Kansas City, October 26, 1911. The meeting will be held in the Mercantile Club Rooms, 6th and Minnesota Avenue. The afternoon session will commence promptly at 1:30 and the evening session at 7:30. An attractive program has been arranged, the preliminary draft of which appears below. The feature of the meeting will be an address on Pellagra with lantern views by Dr. C. F. Menninger. At 6 o'clock the Society will be the guests of the Wyandotte County Medical Society at a dinner at the Grund Hotel. Following is a partial list of the program:

1. "Physical Training of the Young Man", Dr. Jas. Naismith, Lawrence.
2. "Adenoids and Tonsils," Dr. H. Reding, Lawrence.
3. "Safe Methods of Treating Neoplasms of the Intestinal Tract," Dr. Geo. Jones, Lawrence.
4. "The Prevention of Hernia and Adhesions after Operations," Dr. St. Elmo Sanders, Kansas City, Mo.
5. "Foreign Bodies in the Conjunctiva and Cornea, with suggestions Concerning Treatment," Dr. H. L. Alkire, Topeka.
6. "Old Medicine in New Bottle," Dr. O. P. Davis, Topeka.
7. "Practical Value of the Wasserman Reaction," Dr. W. K. Trimble, Rosedale.
8. "Do We Operate for Appendicitis Too Much"? Dr. Hugh Wilkinson, Kansas City, Kans.
9. "Report of Three Cases of Pyosalpinx Complicated by Appendicitis, Dr. R. C. Lowman, Kansas City, Kansas.
10. "Pancreatitis, Dr. J. W. Risdon, Leavenworth.
11. Hernia, Dr. C. J. McGee, Leavenworth.
12. Paper, Dr. C. E. Brown, Leavenworth.

At The Evening Session.

13. "Pellagra," Illustrated by lantern views, Dr. C. F. Menninger, Topeka.

The Mississippi Valley Medical Association.—Plans are being perfected for the big medical meeting in Nashville, October 17, 18, 19, 1911. The local arrangements are in the hands of Dr. John A. Witherspoon and an able committee. The general sessions, the surgical section, and the exhibit will be held in the Young Women's Christian Association building, and the meetings of the medical section in the assembly room of the Hermitage Hotel. This hotel will be headquarters for the Association, and the advance bookings presage a large attendance of medical men.

One feature of the meetings of this Association is the large attendance of the women of the members' families, and special entertainment is always provided for the visiting ladies.

The Association has adopted a permanent lapel button which bears a medallion of Dr. Ephraim McDowell, the pioneer abdominal surgeon, who lived at Danville, Ky., where the profession has erected a monument to his memory. The name of the Association in blue and gold and a white cross make a very attractive design.

This Association was originally the Tri-State Medical Society of Kentucky, Indiana and Tennessee, but the scope of its activities was later enlarged, and while its name is of the valley, it embraces in its membership men from the Atlantic to the Rockies. It has held its meetings in many of the larger cities, from St. Paul to Asheville, N. C., from Columbus and Put-in-Bay, O., to Kansas City. The last meeting in Nashville was held in 1898.

Dr. Henry Enos Tuley, of Louisville, Ky., has been Secretary of the Association since the meeting held in Louisville in 1897, and Dr. S. C. Stanton of Chicago, has served continuously as Treasurer since 1902.

Among the Southern doctors on the program for the Nashville meeting are the following: Louisville—Drs. Louis Frank, Walter F. Boggess, W. D. Haines, E. T. Bruce, Thos. Hunt Stucky; Augusta, Ga.—Dr. Thos. D. Coleman; Asheville, N. C. —Drs. Chas. L. Minor, Silvio von Ruck; St. Louis—Drs. George Dock, Wm. Engelbach, Brandsford Lewis; Memphis, Tenn.—Drs. Frank Jones, Frank D. Smythe; New Orleans—Dr. E. M. Hummel; Richmond, Va.—Dr. Robt. C. Bryan; Cincinnati, O.—Drs. Earl Harlan, E. O. Smith, Lexington, Ky.—Dr. J. A. Stucky. The following Chicago men are on the program: Drs. Robert H. Babcock, Alex C. Wiener, Arthur Elliott, Channing W. Barrett, Wm. Thompson, Fenton B. Turck, Bayard Holmes, Robert B. Preble, Cary Bulbertson.

Preparations are now practically completed for caring for the Sixth Annual Meeting of the Medical Association to be held at Oklahoma City, Oklahoma, October 10 to 12.

As this was the birthplace of this Association, the profession of that bustling city are determined to make this meeting in the form of a re-union, and will spare neither time or expense to make this meeting one long to be remembered.

The guests of honor are Dr. A. R. Edwards of Chicago, who will deliver the Oration on Internal Medicine. An officer to be detailed from the Public Health and Marine Service; Surgeon-General Wyman has not yet designated the officer. Dr. A. H. Andrews, Chicago, Ill., Oculist and Aurist, and the Presidents of the State Associations of Kansas, Missouri, Arkansas, Texas and Oklahoma.

The following is the preliminary draft of the program:

SECTION ON GENERAL MEDICINE.

Dr. C. C. Conover, Chairman. Dr. G. Wilse Robinson, Secretary.

"An Interesting Case of Cerebro-Spinal Meningitis," Dr. Wilmer L. Allison, Fort Worth, Tex.

"Vaso-Motor Symptoms of Infantile Spinal Paralysis," Dr. W. S. Lindsay, Topeka, Kansas.

"Remarks on Ulcers of Stomach and Duodenum, with Citation of a Case of one of the Duodenum," Dr. C. B. Hardin, Kansas City, Mo.

"The Institutional Treatment of Chronic Diseases", Dr. Robt. E. Thacker, Lexington, Okla.

"High Frequency Current in Chronic Affections, Dr. W. T. Wootton, Hot Springs, Arkansas.

"Digitalis and Strychnia," Dr. C. W. Fisk, Kingfisher, Okla.

"The Diagnosis of Pellagra," Dr. Theo. C. Merrill, Colorado, Texas.

"Physiologic Therapeutics," Dr. John W. Bolton, Iola, Kans.

"Bromo-Delirium; Somatic and Physic Indices," Dr. S. Grover Burnett, Kansas City, Mo.

"Recent Advances in the Diagnosis and Treatment of Syphilis," Dr. Wm. Frick, Kansas City, Mo.

"The Treatment of Pellagra," Dr. E. H. Martin, Hot Springs, Arkansas.

"What Shall We Do to be Saved,"? Dr. A. B. Leeds, Chickasha, Oklahoma.

"Malarial Hematuria on Lower Canadian, or Tuberculosis among the Choctaws," Dr. S. E. Mitchell, Stigler, Oklahoma.

SECTION ON EYE AND EAR.

Dr. H. Coulter Todd, Chairman. Dr. J. W. May, Secretary.

"The Conjunctival Flap, The Indications and Methods,"

Dr. R. H. T. Mann, Texarkana, Texas.

"The Treatment of Sarcoma," Dr. H. Moulton, Fort Smith, Arkansas.

"Accessory Sinuses," Dr. H. E. Thomasen, Kansas City, Mo.

"Surgical Methods in Treatment of Retinal Detachment,"

Dr. G. W. Maser, Parsons, Kansas.

"Glaucoma," Dr. Edward H. Cary, Dallas, Texas.

"Ocular Complications in Hysteria," Dr. L. Haynes Buxton, Oklahoma City, Oklahoma.

"Dacryocystitis and the Tear Sac Operation," Dr. Edward F. Davis, Oklahoma City, Oklahoma.

"Trifacial Reflexes," Dr. A. H. Andrews, Chicago.

"The Control of Post-Tonsillar Hemorrhage," Dr. J. E. Sawtell, Kansas City, Kansas.

"Report of a Case of Congenital Coloboma of the Eye Lids,"

Dr. A. W. McAlester, Kansas City, Mo.

"Hypopion Ulcer from Disease of the Lachrymal Sac," Dr. J. H. Barnes, Enid, Oklahoma.

"Every Day Eye Injuries," Dr. R. S. Magee, Topeka, Kans.

"Tonsils and Adenoids," Dr. D. L. Shumate, Kansas City, Mo.

"Deformities of the Nasal Septum and their Treatment,"

Dr. D. D. McHenry, Oklahoma, City, Oklahoma.

SECTION ON SURGERY.

Dr. John F. Kuhn, Chairman, Dr. Howard Hill, Secretary.

"Resection of the Cæcum" Dr. B. F. Fortner, Springfield, Mo.

"Osteo-Myelitis; and Report of A Case," Dr. J. E. Oldham, Wichita, Kansas.

"Neuralgia Deep Alcohol Injections," Dr. B. L. Hale, Cherryvale, Kansas.

"Chronic Intestinal Stasis," Dr. J. F. Binnie, Kansas City, Mo.

"Ischæmia in the Primary or Acute Stage," Dr. Charles H. Cargile, Bentonville, Arkansas.

"A Comparative Study of the Practice of Surgery in Mexico and the United States," Dr. L. H. Huffman, Hobart, Oklahoma.

"Pelvic Displacements, Causes and Rational Treatment,"

Dr. Frances A. Harper, Pittsburg, Kansas.

"The Principles of Success in Hernia Operations," Dr. St. Elmo Sanders, Kansas City, Mo.

"Sequelæ of Polio-Myelitis." Dr. J. D. Griffith, Kansas City, Mo.

"Total or Subtotal Hysterectomy," Dr. H. C. Crowell, Kansas City, Mo.

"Abdominal Injury with Pitch Fork Handle, by the Perineal Route," Dr. W. H. Addington, Altoona, Kansas.

"Rectal Prolapse with Report of Cases," Dr. E. H. Thrailkill, Kansas City, Mo.

"Abdominal Drainage," Dr. Chas. Blickensderfer, Shawnee, Oklahoma.

"Significance of Pain in the Upper Abdomen," Dr. Arthur W. McArthur, Kansas City, Mo.

"Advances in the Preparation and After Treatment of Pelvic Operative Cases," Dr. H. S. Crossen, St. Louis, Mo.

"Septic Infection," Dr. W. J. Jolly, Oklahoma City, Okla.

"Careful Diagnosis a Professional Duty," Dr. E. D. Ebright, Wichita, Kansas.

"Three Cases of Tumor of the Mesentery," Dr. H. E. Pearse, Kansas City, Mo.

"Post-Operative Ileus," Report of a Case Relieved by Intestinal Puncture," Dr. LeRoy Long, McAlester, Oklahoma.

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The Wilson County Medical Society held its Fall meeting at Buffalo, Tuesday evening, September 12th., 14 of our 18 members being present. All the visiting members made the trip in autos. Drs. Moorehead, Randall and Sharpe from Neodesha; Drs. Addington, Moore, Jones and Billingslea from Altoona in Dr. Somers new Reo; Dr. Riley from Benedict and Drs. Young, Wiley, Flack and Duncan from Fredonia.

Considerable business was attended to, one matter being the swearing to a complaint against a youth for using an "oxyline" machine at Neodesha. I have no doubt but our County Attorney Edmundson will see that strict justice is done in the case.

Dr. F. M. Wiley read a paper on Infantile Paralysis which was to the point, as some of us have never seen one of these cases.

A young man was brought before the society by Dr. Bell of Buffalo. This patient presented an interesting problem. Had a dislocation and fracture of the elbow joint several months ago. Seems to me that our Society and all other County Societies could with benefit have one or more interesting cases come before them at each meeting.

A little difference of opinion between two of our members was adjusted to the entire satisfaction of all. I mention this only to emphasize the fact that all differences between us can better be settled this way than in any other manner.

The application of Dr. Geo. P. Bell of Buffalo was received and he was elected to membership. This leaves but three eligible physicians in this county who are not members of our county society, and I am going after them and hope to bring them in before January 1912.

After the meeting adjourned we all were invited to the home of Dr. J. C. Preston where Mrs. Preston served a nice lunch. This is the first time we have met at Buffalo, but if attendance, interest and a good time is a guide, we should meet there again.

The Winter meeting will be at Fredonia in December.

E. C. DUNCAN, Secretary.

NEWS NOTES

Dr. W. S. Spilter of Wellington has returned from Colorado.

Dr. S. L. Coplan of Wellington, is doing post-graduate work in Chicago.

Dr. F. B. May of Hunnewell, has returned from Ohio, where he spent his vacation.

Dr. H. A. Vincent of Peith, has returned from his summer vacation.

Dr. James Stewart has been appointed city physician of Topeka, vice Dr. Henry B. Hogeboom resigned.

Dr. Charles H. Ewing of Larned, has been appointed head physician for the Modern Woodmen of America of Kansas.

Dr. J. J. Sippy of Belle Plaine, spent his summer vacation fishing for mountain trout in Western Colorado.

Dr. M. McComas of Fall River, Kansas, was married August 14th to Miss Myrtle B. Ide of Topeka.

Antityphoid Vaccination Compulsory.—By recent order of the Secretary of War, on recommendation of the surgeon general, antityphoid vaccination is made compulsory for all officers and men of the army under 45 years of age.

The Northeast Kansas Medical Society will meet in Kansas City, Kansas, October 26, at 1:30 and 7 p. m. at the Mercantile Club Rooms..

Dr. Ernest M. Seydell of Wichita, was married August 8th to Miss Margaret M. Carter of the same place.

Dr. C. B. Wycoff of Greensburg, Kansas, was married August 9th to Miss Rose Snyder of Topeka.

Notice to Physicians and Health Officers.—The law passed by the last legislature known as the "Vital Statistics Law" is now in operation. By the provisions of the law all births and deaths must be registered with the local registrar (who is the city clerk) in the district in which they occur; no further reports of births and deaths by health officers should be made to the State Department of Health.

Physicians should be prompt in making their reports to the local registrar, and if not already registered with him to do so at once. Local registrars have been instructed to enforce the law without fear or favor. **We must and will Have Accurate Statistics in Kansas.** We must be in the "Registration Area."—Bulletin Kansas State Board of Health.

The American Association of Obstetricians and Gynecologists met at Louisville, September 26-28.

The American Academy of Ophthalmology and Oto-Laryngology met in Indianapolis, September 25 to 27.

The American Laryngological, Rhinological and Otological Society met at Philadelphia, September 6 and 7.

American Medical Directory. The third edition of the American Medical Directory, published by the American Medical Association, is now in course of preparation and will be issued about the end of the year.

Annual Meeting of Missouri Valley Medical Association.—At the annual meeting of the Missouri Valley Medical Association held in Omaha, September 7 and 8, the following officers were elected; president, Dr. John M. Bell, St. Joseph; vice-presidents, Drs. Arthur C. Stokes, Omaha, and Dr. S. Grover Burnett,

Kansas City; treasurer, Dr. Oliver C. Gebbart, St. Joseph; secretary, Dr. Charles Wood Fassett, St. Joseph. Colfax, Ia., was selected as the next meeting place.

Dr. C. A. Lilly has been made division surgeon for the Missouri Pacific Railroad at Atchison. Dr. D. M. Mitchell has been made local surgeon for the same.

Dr. J. E. Bribach of St. Louis, Mo., has located in Atchison, where his practice will be limited to the eye, ear nose and throat.

At the annual meeting of the Medical Section of the National Fraternal Congress, held at Cambridge Springs, Pa., July 24, Dr. E. S. Pettyjohn of Topeka, was elected president.

Dr. George W. Jones of Lawrence, has returned from an extensive trip east, where he has been doing post-graduate work.

Dr. S. C. Emley who has been connected with the Medical Department of the Kansas University at Lawrence, has resigned and entered partnership with Dr. J. E. Sawtell. He will confine his work to diseases of the ear, nose and throat. He will office with Dr. Sawtell in the new Waldheim Building at 11th and Main Streets, Kansas City, Mo., and reside in Kansas City, Kansas.

A KANSAS DOCTOR "CONVICTED."

J. N. Peters, Suggestive Healer, Had Practiced Without a License.

SMITH CENTER, KANS., Sept. 16.—John N. Peters, charged with practicing medicine without a license, was found guilty today in the district court of the Fifteenth Judicial District.

Peters had been arrested four times for maintaining an office and treating the sick without a license. He claimed to be a graduate of an institute of suggestive therapeutics. At the instance of Dr. H. A. Dykes, secretary of the state board of medical registration and examination, Peters was brought to trial for a plain violation of the law governing the practice of medicine in this state. His was understood to be a test case.—K. C. Star.

Doctor Flexner Wins Scottish Prize.—The University of Edinburgh has awarded the Cameron Prize in Practical Therapeutics to Dr. Simon Flexner, director of the Rockefeller Insti-

tute for Medical Research in New York City. This prize, amounting to \$500, is awarded every five years to the person who, in the preceding five years, has made an important contribution to practical therapeutics. The award to Doctor Flexner was made in recognition of his researches on epidemic cerebrospinal meningitis and on its treatment with antimeningitis serum. In accordance with custom, Doctor Flexner has been invited to give an address at the University of Edinburgh, some time during the coming academic year, on the researches in recognition of which he has received the Cameron Prize.—N. Y. Medical Journal.

University Medical College to Continue.—It is announced that the University Medical College of Kansas City, which was reported to have closed its doors, is to be continued but that, it will give only the last two, or clinical years. It is stated that it will accept only students who have taken the first two years' work in medical schools having standards as high as those held by the University of Missouri Department of Medicine.

Annual Meeting of the American Urological Association.—The American Urological Association will meet in annual session in Chicago on September 26th and 27th, under the presidency of Dr. Hugh Cabot, of Boston. Dr. H. A. Fowler of Washington, D. C., is secretary of the association.

The Public Drinking Cup Abolished in Chicago.—The city ordinance prohibiting the use of the public drinking cup became effective on Tuesday, August 8th. A State law abolishing this public health menace previously went into effect on July 1, 1911. In this connection the Department of Health has prepared a poster setting forth the terms of the ordinance and carrying an illustration showing how to make a paper drinking cup. These posters are designed for display in factories, lodging houses, schools, offices and other places where numbers of persons have been in the habit of using a common cup.—N. Y. Medical Journal.

International Congress of Pathology at Turin, Italy.—This congress has been scheduled to meet at Turin, October 1 to 5, and extensive preparations have been made for the scientific work.

Dr. H. C. Hays has removed his office from the Commerce Bldg. to the new Rialto Bldg., Kansas City, Mo.

Case Reports.

Herpes Zoster and Kidney Lesions.—Two cases of herpes zoster associated with kidney disease are reported and commented on by M. Krotoszyner, San Francisco (Journal A. M. A., September 9). The hyperalgetic peripheral zone of the kidney, according to Head, corresponds to that area of the integument innervated by the tenth and eleventh dorsal and upper lumbar spinal nerves. Within the last few months several cases of herpes zoster of this region, in connection with attacks of kidney colic, have been reported by European authors, Bittorf Kanera, and Rosenburg. He also refers to the very recent report of two cases by Rosenbaum. His own cases, he thinks, prove the correctness of Head's teachings and illustrate the diagnostic value of careful investigations of Head's hyperalgetic cutaneous zones in all cases of abdominal colic of otherwise doubtful character.

OBITUARY,

William S. Browne, M. D., Bennett Medical College, Chicago, 1875; formerly of Watseka, Ill; a member of the Illinois State Medical Society; died at his home in Opolis, Kan., August 21, from cerebral hemorrhage, aged 67.

MISCELLANEOUS.

Tight Collars and Headaches.—Headache is caused oftentimes by the tight and high collar, so a Vienna doctor has found. His attention was one day drawn to the high neckband of a woman patient who was subject to violent pains in the head and dizziness; he persuaded her to lay aside this form of neckwear, with the result that the compression of the neck ceased and she was cured. Following up this result the doctor has paid much attention to the collars of those of his patients suffering from headache; in almost all of his cases the change to lower and wider neckbands was beneficent.—Medical Times.

Salvarsan "606" Analyzed.— At the request of the Council on Pharmacy and Chemistry of the A. M. A., the Association Laboratory has analyzed salvarsan, and the full report appears in the Journal, December 31. It seems that the chemical claims made for the product by its originators are practically confirmed. The fact that this epoch-making discovery has been submitted

to the Council is the most emphatic endorsement of its work yet achieved. So marvelous are the reports concerning the clinical success of salvarsan that the manufacturers might well conclude that the endorsement of the Council would be entirely unnecessary, the product being assured success by the mere force of its exclusive value. But the sales agents of the remedy were assured that they had nothing to fear, both because of the honesty of the product and the honesty and integrity of the Council. In this respect we stand alone as a nation; no other country has a like protection from imposition.

The following condensed description of the behavior of salvarsan is given in the report: "Salvarsan is an arsenic compound containing that metal in a low state of oxidation and the product is, therefore, a powerful reducing agent and is decomposed by bodies which are oxidizers, including air. The amine groups of the body give it the character of a weak base, enabling it to form salts such as the chlorid, the salt that constitutes salvarsan. Being a weak base, its hydrochlorid, when dissolved in water, is largely decomposed by the latter (hydrolysed) and hence gives a solution having an acid reaction. A solution of salvarsan is, therefore, acid and will remain so until for every molecule of salvarsan there have been added two molecules of sodium hydroxid or a similar monovalent base.

"Salvarsan also contains two phenol (hydroxyl) groups and in agreement with phenols in general it forms compounds with strong bases (phenolates.) When, therefore, the free base from salvarsan has been precipitated by addition of an alkali and further alkali is added, a clear solution of the sodium salt will result when two further molecules of sodium hydroxid on a similar monovalent base have been added. It is the free insoluble base that is injected subcutaneously and intramuscularly in the form of a suspension, and it is the alkaline water-soluble sodium salt which is injected intravenously in the form of a solution."—Texas State Journal of Medicine.

CLINICAL NOTES

The intrauterine use of instruments, as sounds, curettes, dilators, etc., is a surgical procedure and should seldom, if ever, be indulged in outside of the operating-room, and under no circumstances without thorough antisepsis. Formerly the uterine sound was a fertile source of infection of the uterine cavity, the Fallopian tubes and occasionally the peritoneum, not to mention the large number of abortions that were accidentally produced.—Dr. Ralph Waldo, International Journal Surgery.

Late Conceptions of The Rationale of Salvarsan.—In an editorial, the *Therapeutic Gazette* quotes a number of writers whose experience with salvarsan has led them to deviate from the rules given for its administration in the early communications. Neisser repeats the injection in three to six weeks, and follows this with a course of mercury, the two remedies seeming to work together even better than separately. Michaelis advocates a repetition of the injection in all cases. Schreiber has already carried this out in some 650 cases, in only one of which did a recurrence take place, and that in a case in which the second injection was not given till after the recurrence. Kromayer expresses himself frankly in favor of a chronic intermittent treatment, by giving repeated injections of small doses (six doses of 0.12 gramme) within a period of twelve days. And lastly, Ehrlich himself, in his latest word on this subject, recommended an intravenous injection of 0.4 to 0.5 gramme, followed in forty-eight hours by an intramuscular injection, after the method of Kromayer, of 0.3 to 0.4 gramme, in order to supplement the more intense but fleeting action of the intravenous injection by the more prolonged but less intense one of the intramuscular deposit. Fortunately, so far, and in contra-distinction to such drugs as arseno-phenylglycin, patients have not shown anaphylactic tendencies nor increasing sensitiveness to "606."

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Knee-Jerk.—A. A. Eshner, Philadelphia (Journal A. M. A., September 2), describes two procedures which he has found useful in eliciting a dubious knee-jerk. The first consists in supporting the leg to be examined on an inclined plane while the patient is seated, the slope of the plane being varied to suit the needs of the case. This secures relaxation of the limb independently of the volition of the patient and the limb can be placed in the most favorable position for bringing out the symptoms. It is particularly useful in case of obese individuals and in case of patients who will not willingly cooperate with the examiner. The second procedure consists in the application of the palmar surface of the index finger of one hand over the patellar tendon and striking the dorsal surface of this finger with the percussion hammer or with the opposite clenched hand. In this way a slight contraction of the tendon can sometimes be felt though not otherwise demonstrable. Both methods are illustrated. Under any circumstances it is best to have the test on the bare knee without the intervention of clothing.

Appendicular Abscess.—Van Buren Knott, Sioux City, Iowa (Journal A. M. A., August 12), discusses the question whether we should or should not remove the appendix in every case of localized appendicular abscess. In the last three years he has operated on 283 cases, sharply localized, with only three deaths. In none of them was the general peritoneal cavity infected. These results were infinitely better than when he had allowed the appendix to remain on account of adhesions, using only incision and drainage. He noticed that in the cases where the appendix had been removed, a large rubber drain put in and the Fowler position employed, convalescence was uniformly smooth and rapid. By separating the adhesions small collections of pus were cleaned out, and the free separation of adhesions tends largely to lessen the danger of post-operative obstruction. With the patient in Fowler's position a large rubber tube will drain the lower peritoneal pouch much more rapidly and completely than the region immediately adjacent to the cecum can be drained, as a tube in the latter position will be more rapidly shut in by limiting adhesions. He gives the technic of his operation. The incision is made through the right rectus muscle, splitting the fibers, and the peritoneal cavity freely opened. Gauze packs are adjusted to prevent escape of pus upward or toward the median line and the abscess cavity freely opened, the pus mopped out and the appendix exposed and removed. All adhesions separating the abscess cavity from the lower pelvis are now freely separated and the pus or sero-pus found in the lower peritoneal pouch mopped up with sponges. A large split rubber tube, from one-half to one inch in diameter and carrying a wick of iodoform gauze, is inserted through the lower end of the wound to the bottom of the rectal vesical pouch, the protecting gauze packs are removed and the wound closed down to the tube with through and through interrupted silkworm sutures. The patient is put in a bed with the head elevated at least thirty inches from the floor and is turned on the right side, which position is maintained for twenty-four hours. Proctoclysis is kept up as long as necessary. Water is allowed, not more than an ounce at a time and frequently repeated, pain is controlled by morphine and nourishment is withheld for forty-eight hours and then given sparingly.

Dionin will rid the cornea of many of the minor scars following injury or ulceration. It must be used early to get results, and in a solution of 5 or 10 per cent. It will also heighten the effect of atropine when used in iritis.

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No. 11

POST OPERATIVE TONSILLAR HEMORRHAGE.

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This is a subject of no minor importance to every surgeon who operates upon the tonsils regardless of whatever method or technic he may employ. A comparison of the small number of reported fatalities with the vast number of operations that are daily performed upon the tonsils, brings about a measure of composure that tends to lull the inexperienced operator into a feeling of security, while the fact remains that only a very small per cent of the fatal cases are ever made known so that any tabulation can be made. I have knowledge of several cases none of which have ever been reported and it is fair to presume that such is the case elsewhere.

Dangerous hemorrhage is less frequent than serious hemorrhage but the latter is not uncommon. Daly says: "The man who says he has never had an alarming hemorrhage after this operation has yet to meet his Sedan".

A few years of experience and a knowledge of the literature should be sufficient to convince any one that the modern operation for the removal of tonsils is no insignificant procedure and should be classed with the major operations.

Whether or not the dangers from hemorrhage are greater after a tonsillectomy than a tonsillotomy depends largely upon the skill of the operator. In this connection Shurley offers the following excellent advice: "If the general surgeon, the ophthal-

mologist, and the general practitioner must remove tonsils, they are respectfully advised to do a tonsillotomy until they may receive instructions, at least in the details of a complete enucleation."

The tonsil is situated in the sinus tonsillaris and has for its anterior boundary the glossopalatine fold, and for its posterior boundary the palatopharyngeal fold, commonly known as the anterior and posterior pillars. Its external boundary is the superior constrictor muscle.

The blood supply of the tonsil is derived from the following arteries given in the order of greatest importance:

A The tonsillar artery is given off from the external maxillary, near the external carotid, and passes upward and forward under the jaw into the loose, fatty tissue of the pharyngo-maxillary space. Opposite the middle portion of the tonsil the artery gives off a terminal which passes to the buccopharyngeal fascia which covers externally the superior constrictor muscle. Here the artery usually divides into a superior and inferior branch before passing through the muscle.

The tonsillar artery being normally the largest to supply the tonsil, and having its origin from the external maxillary, close to the external carotid, is most likely to be the source of dangerous hemorrhage when it occurs.

B The ascending pharyngeal, a small branch of the external carotid, gives off two branches as it passes upward. One opposite the tonsil, a small branch, is called the ramus tonsillaris; another higher up, somewhat above the tonsil and which supplies the upper portion, is called the descending palatine. It is this artery, next to the tonsillar, that may cause dangerous hemorrhage, which occurs in the upper portions of the sinus tonsillaris.

C The ascending palatine, given off from the external maxillary, passes up to the outer side of the pharynx and gives off a branch to supply the tonsil, which anastomoses with the descending palatine and the tonsillar artery.

D The dorsalis linguæ is a small artery given off from the lingual to the dorsum of the tongue. It supplies the mucus membrane of the tonsil, pillars and the epiglottis. Other points of arterial hemorrhage are usually limited to the anterior and posterior pillars. However, hemorrhage from this source is not likely to occur unless the pillars have been unnecessarily injured during the course of the operation.

Venous hemorrhage when it does occur is not usually severe and is likely to be found in the inferior portion of the sinus tonsillaris where the tonsillar venous plexus is located.

The bucco-pharyngeal fascia, which covers the superior constrictor muscle externally, forms the inner boundary of the pharyngo-maxillary space, in the posterior part of which are found the larger vessels. The internal carotid lies posterior to the tonsil about one half inch while the external carotid lies outward and backward at a distance of three fourths of an inch. They are separated from the tonsil by the superior constrictor, the stylopharyngeus and inferiorly by the styloglossus muscle. From this it will be observed that the large vessels are never in danger of being wounded in the performance of tonsillectomy when done by skillful hands.

Post-operative tonsillar hemorrhage may be due either to constitutional or local causes. The best means of controlling hemorrhage in constitutional cases is to anticipate it by a careful examination of the patient and avoid operation in the cases found to be unsafe.

Local causes should account for the greatest number of cases of post-operative tonsillar bleeding for the reason that it is impossible to determine beforehand the conditions to be encountered. For convenience it may be classified as follows:

First.—Moderate hemorrhage. This usually follows any operation and subsides without measures for relief.

Second.—Severe hemorrhage. This may be more or less continuous, with some interruptions, not severe enough to be dangerous, though it may become so by its persistence.

Third.—Dangerous hemorrhage. It may be considered dangerous when either the rapid or continuous flow threatens the life of the patient.

Both dangerous and severe hemorrhage may become fatal; the former rapidly so while the latter eventually.

In my experience hemorrhage due to an abnormal condition of the blood is more or less continuous from the time of operation while that due to an abnormal condition of the arteries may be either primary or secondary.

An anomalous distribution of the arteries about the neck and especially those furnishing the blood supply to the tonsil is very rare with one exception and that is where some one of the arteries passes into the base of the tonsil before dividing into smaller branches. The post mortem findings in fatal cases from hemorrhage as well as dissections upon the cadaver furnish evidence of this fact. The anomaly that is most likely to account for a severe hemorrhage is an increase in the size of one or more of the arteries furnishing the normal blood supply.

Repeated acute attacks of peritonsillar inflammation result in a chronic peritonsillitis in which case there is an increase in the caliber of the arterial blood supply and this may often account for free hemorrhage. In such cases where a tonsillectomy is performed there is the same danger from hemorrhage that there is after a tonsillotomy on account of the dense fascia of the superior constrictor muscle preventing the retraction of the arteries.

The pillars may be cicatricially bound down to the tonsil and unless great skill is used in making the separation much hemorrhage may be the result as well as an irreparable damage to the parts.

But few cases of tonsillar hemorrhage due to hemophilia have been reported for the reason that the condition is usually known and operation declined. In such cases the hemorrhage would be a capillary oozing from all the wounded tissues and not necessarily from a spurting artery. The same would hold true in case of hemorrhage from some form of anemia though less persistent but this too is usually suspected by the careful surgeon and a blood examination is made to determine the advisability of an extirpation.

High blood pressure especially in the more advanced age should be carefully considered before advising an extensive operation. A single case of post-operative hemorrhage due to such neglect will serve as a reminder for the future that less heroic measures for relief, though not so complete, will be better for both the patient and surgeon.

Should one be so unfortunate as to perform a tonsillectomy upon a case of true hemophilia it is more than probable that the death of the patient will serve as a penalty for the mistake, regardless of whatever means may be employed for the control of hemorrhage.

The bleeding that is of the greatest moment to the surgeon is that from the arterial supply for it is from this source that it is most frequently encountered and no previous examination will lend evidence of the danger except in arterial sclerosis where the blood pressure is high.

While the per cent of fatal hemorrhage is small yet no one is justified in doing an extirpation of tonsils without being reasonably well equipped for the control of hemorrhage regardless of how great the emergency may be.

A hemorrhage that seems to come from all the wounded tissues and that has refused to yield to ordinary remedies may be brought under control by placing a firm pack of gauze moistened with

adrenalin solution, in the sinus tonsillaris and stitching the pillars over it. But it is only where the bleeding is not localized will such a measure be required.

When an arterial hemorrhage is encountered that offers any evidence of becoming serious no temporizing measures are indicated, but rather the rational surgical procedure which is employed for the control of such hemorrhage elsewhere. For some years I have employed the following method: If the bleeding point is easily located then the vessel is seized with a sharp or bayonet forceps plunged through the fascia into the muscular tissue beyond, when both torsion and gentle traction are made and the forceps allowed to remain for a few moments. By this method the muscular coats of the artery are crushed beyond the fascia of the constrictor muscle and the clot allowed to form deeper down in the bleeding vessel.

Should it be found difficult to locate the bleeding point then the superior constrictor muscle with its fascia is grasped with the bayonet forceps and drawn through the sinus tonsillaris to the outer border of the pillars when all bleeding vessels that penetrate this muscle can easily be found, as well as the descending palatine. They are then dealt with in the manner as above described.

Should it be thought advisable to use a ligature the mouth of the artery can be grasped more superficially with another forceps and the ligature applied with rapidity and ease while the muscle is thus drawn out. For some years I have not used a ligature and have not had a single case of recurring hemorrhage nor has there been the slightest amount of sepsis observed after using the above method.

The lower portion of the sinus tonsillaris is not always so easily everted as the upper on account of the more or less firm connection of the superior constrictor muscle to the posterior pillar, which in turn is attached to the posterior pharyngeal wall. But this is unnecessary as by pulling the anterior pillar well forward and having a good light a splendid view can be obtained of the lower portion of the sinus and by the use of the penetrating forceps all bleeding can be controlled usually without much difficulty.

An eversion of the sinus may not bring to view bleeding points on the lower portion of the pillars for the reason already stated. But with the head of the patient placed in the most favorable position and the anterior pillar drawn well to the front the hemorrhage can be located and controlled by the method described.

The superior constrictor muscle being very thin the loose bucco-pharyngeal fascia external to it allows an eversion of the sinus tonsillaris with comparative ease if only the muscle with its fascia is siezed with the forceps. The same principle is involved as when the tonsil is freed from all its attachments except its base and drawn toward the median line of the pharynx for final removal with the snare. It is then that this muscle is drawn to the inner border of the pillars and that caution must be used in making traction lest the muscle should be drawn beyond the pillars and incorporated in the loop of the wire while removing the tonsil.

Primary hemorrhage is much easier to deal with than secondary on account of the patient being under the effects of either local or general anæsthesia.

Severe or dangerous secondary hemorrhage coming on after the patient is out from under the affects of the anæsthetic should be dealt with surgically and this can be done best under general anæsthesia.

Never compromise with a blood clot in the sinus tonsillaris in case of secondary hemorrhage if it has been at all severe and there is still a slight flow from beneath the clot. Cleanse the hands and then with finger or currette remove every particle of the clot when firm pressure for a few moments over the bleeding point will often arrest the hemorrhage without further measures. The fact that there is clotting shows the coagulability of the blood and that this has taken place outside of the bleeding vessel first. Such hemorrhage may be due to some blood dyscrasia that slows the time of coagulation and it is in this class of cases that firm pressure applied over the bleeding point may allow thrombosis to take place without having to resort to torsion.

CONCLUSIONS.

1. Hemorrhage due to constitutional causes can usually be prevented by a careful examination of all suspected cases before operating.
2. Hemorrhage due to abnormalites of the blood vessels can usually not be guarded against.
3. Notwithstanding the low per cent of fatalities no operator should perform an extirpation of the tonsil without being well prepared for the control of hemorrhage.
4. Since all hemorrhage by rhexis is controlled either by thrombosis or contraction of the vessel wall or both, crushing the vessel and using torsion and gentle traction with suitable forceps will commonly control the hemorrhage without such cumbersome methods as are often employed.

**TRIFACIAL REFLEXES WITH SPECIAL REFERENCE TO
DISEASES OF THE EYE, EAR, NOSE AND THROAT.**

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The subject of trifacial reflexes has claimed the attention of physicians from very early times. No one knows who was the first to call attention to them or when the upper canine teeth began to be called "eye" teeth, but it was because of some supposed relation between them and the eye as evidenced by pain and other disturbances of the eye associated with disease of these teeth. We find references to pain in the ear associated with tonsillitis and excessive lachrymation caused by nasal and dental disease mentioned by several writers early in the last century but credit is given to Hack (1882) for the first presentation of general clinical observations based upon the anatomic distribution of the fifth nerve. Two years later cocain was discovered and because of its anesthetic and detergent effect upon the soft tissue of the nose, nasal conditions could be more thoroughly investigated. Rhinologists were not slow to occupy the new field and as a result hundreds of papers were written upon nasal reflexes and neuroses, and in their enthusiasm one or another claimed, or at least suggested, that almost every ill of humanity might have its origin in the nasal cavity.

To show the remarkable progress made in rhinology in a very short time after Hack's paper and the discovery of cocain, I will quote from J. A. White in Burnett's *System of Diseases of the Ear, Nose and Throat* (1893). "Enthusiasm has carried some observers too far, whilst others in their extreme conservatism have taken alarm from this fact, and, shutting their eyes to the plainest kind of evidence, have denied the existence of nasal neuroses at all."

The pathological reflex manifestations that have been supposed to emanate from peripheral irritation of the nasal branches of this complex nervous communication are almost legion. The first to which attention was particularly directed was asthma, (Voltolini, 1871); and following this observation came many other clinical reports of different neuroses, apparently dependent upon nasal disorder, and cured by the treatment of the nasal affection. They comprise sensory, motor, vaso-motor, and trophic neuroses of various organs, as follows:

Of the Eye.—Conjunctivitis, keratitis, phlyctenular ophthalmia, chemosis, glaucoma, asthenopia, muscæ volitantes, etc.

Of the Ear.—Tinnitus, pain, itching of the external meatus, snapping noises (Burnett), spasmodic action of the tensor tympani, etc. **Of the Nose.**—Spasmodic sneezing, hyperæsthesia, hydrorrhœa, perversion or deprecation of the olfactory sense, epistaxis, erythema, acne of nose, cough, etc. **Of the Pharynx.**—Paræsthesia, sensation of foreign body, neuralgia, dysphagia, and paresis of palate muscles. **Of the Mouth.**—Herpes, salivation, and toothache. **Of the Larynx.**—Aphonia, cough, and laryngeal spasm (croup.) **Of the Bronchi.**—Asthma and bronchitis. **Of the Gastro-intestinal Tract.**—Irritation, dyspepsia, etc. **Of the Skin.**—Erythema, acne, herpes, urticaria, erysipelas, œdema, localized perspiration, etc. **Of the Heart and Circulation.**—Cardialgia, palpitation, symptoms closely resembling angina, and exophthalmic goitre. **Of the Muscles.**—Rheumatic pains, spasmodic twitchings, convulsive movements, choreiform in character; etc. **Of the Brain and Nervous System.**—Hemicrania, migraine, neuralgias of the trigeminus, epileptiform seizures, etc., loss of memory, inability to fix the attention (aprosexia), melancholia, neurasthenia, etc.

Whilst the above neurotic manifestations accompanying or dependent upon irritation of the nose and naso-pharynx have been reported by numerous authors as the result of their clinical observation, it must be said that the connection between the supposed cause and the apparent effect has not been satisfactorily demonstrated in many instances, and there is no doubt that the enthusiastic rhinologist has been frequently led into the error of confounding cause and effect because of the coincident appearance of the two affections in the same subject."

Since White's time many writers have contributed to the subject but there is still so much that we do not know, and such a broad field for observation, and so many who are daily coming in contact with pathologic manifestations of these reflexes without recognizing them, that the presentation of an additional paper at this time seems justifiable.

In discussing trifacial reflexes three phases of the subject should be considered, viz; the anatomic, the physiologic and the clinical; though each phase is in itself too extensive for thorough consideration in a paper of reasonable length.

ANATOMY.

The fifth nerve arises by two roots, the portio major (sensory) and the portio minor (motor), which leave the brain on the anterior surface of the medulla. This nerve resembles the spinal nerves in that it has both a sensory and a motor root and has a

ganglion on its sensory root. This ganglion, the Gasserian, lies in a depression at the inner end of the petrous bone. The motor root lies in contact with the ganglion but has no nerve connection with it. At it leaves the ganglion the nerve divides into three trunks, the ophthalmic, the superior maxillary and the inferior maxillary. The two upper trunks are entirely sensory while the motor root unites with the lower trunk and supplies the muscles of mastication. The ophthalmic division gives off a meningeal branch to the tentorium cerebelli and supplies nerves of sensation to the eye ball, conjunctiva, lachrymal gland, nasal fossa and the skin of the nose, eyebrow and forehead. It receives branches of communication from the cavernous plexus of the sympathetic and from the third, sixth and sometimes the fourth. The lenticular ganglion lying in the orbit receives a branch from the nasal nerve and sends nerves to the ciliary muscle and iris.

The superior maxillary division gives off a meningeal branch and supplies nerves of sensation to the upper teeth, lip, cheek, temple and the lachrymal apparatus. The sphenopalatine ganglion lying in the sphenomaxillary fossa receives a branch from this nerve, one from the carotid plexus, (the Vidian), a branch from the facial, and sends nerves to the pharynx, palate, turbinate bodies and the floor of the nose.

The inferior maxillary division has some interesting relations through the otic ganglion but otherwise has little bearing on the conditions under present consideration. All the ganglia of the fifth nerve communicate freely with the sympathetic system, the vaso-motor nerves from which accompany the blood vessels in their ramifications. Thus any impulse which could disturb the nerve control of the arteries of a given area, would cause vascular changes in the tissue of that part.

PHYSIOLOGY.

The difficulties encountered in the study of sensory reflexes from a physiologic standpoint seem almost insurmountable. In the textbooks on physiology much space is devoted to motor reflexes and to combined sensory and motor reflexes, but the purely sensory reflexes are barely mentioned.

For the production of a motor reflex it is agreed that there must be an afferent sensory nerve leading to a ganglion, an afferent motor nerve leading from the ganglion, and there is usually a third line of communication from the ganglion. This is the nerve leading to the brain and affects consciousness as a sensation. This combination of elements forms the so-called "reflex arc." The "arcs" are often very complicated in structure

and action, having paths of different resistance which are said to determine the form and intensity of the reflex action according to the source and intensity of the sensory impression. The neurophysiologists have not yet been able to agree on what sensation is and how it is produced. One school holds to what is called the anatomic theory, i. e., for every different form of sensation there is a special peripheral end-organ, a special conducting nerve element and a specific central ganglion and cortical area, where, in the sphere of consciousness the impulse is recognized and located as pain, heat, cold, pressure, etc. Another school conceives of the impressions called sensation as entirely physiologic. Just as the mental impression caused by the impulses coming from the eye are called sight, and the impressions caused by impulses coming from the ear are called sound, so the impressions caused by the impulse coming from the periphery we have mentally classified and unconsciously agreed to call pain, heat, cold or touch as the case may be.

A third and later conception of sensation attempts to harmonize the two preceding views. According to Mettler it teaches that by means of intercalated neurons, ganglia and relay stations of gray matter an impulse that starts at the periphery as a mere chemical or molecular disturbance is so added to, modified and elaborated in its progress upward toward the centers of consciousness in the brain that, by the time it has arrived at those centers, and not before, it has become all that we mean by the specific term sensation. Sensation is thus a direct product of histophysiologic activity, but it is a physiologic elaboration or summation. It does not exist at the periphery; it is only complete at the center.

This theory becomes very complicated as we follow it out but in its essentials it offers the best explanation of the phenomena of sensory reflexes. The nerves coming from the different organs supplied by the fifth are known to arborize around the same centers in the ganglia. From these nerve centers the impulse is carried to the cortical areas where it is recognized as a sensation, but the center in the ganglion being in the habit of transmitting impressions received from different peripheral areas the mind receives a double impression. The well known normal sensory reflex in the throat caused by tickling the auditory canal is thus easily explained. The cough which the reflex sensation in the throat produces is one of the combined sensory and motor reflexes.

Other physiologic trifacial reflexes, sensory, motor and vasomotor, have been observed. When the front teeth ache after application of cocain to the septum, it is probably due to the effect

of the cocain on the naso-palatine nerve which comes across the septum and supplies the tissue surrounding the teeth and sends a communicating branch to the dental nerve supplying the upper incisors and canine teeth. Sneezing is produced by irritations of the retina by a strong light. Lachrymation can be produced by almost any irritation in the nose. Cough can be produced by tickling the posterior end of the inferior turbinals. Conjunctival and circumcorneal injection are brought about by cauterizing the turbinals. In one case conjunctival congestion with some impairment of vision followed exploration of the sphenoid cavity and lasted several days.

CLINICAL.

This brings us to the clinical side of the subject. Assuming that an irritation of the terminal filaments of a sensory nerve may produce a disturbance of sensation referred to the terminal filaments of another branch of the same nerve, (and there is abundant clinical evidence to confirm this hypothesis) it is easy to see how disturbances of vision through the ciliary nerves, lenticular ganglion and the cavernous branch may produce frontal headaches; or through the Gasserian ganglion to the branch of the tentorium cerebelli may produce occipital headache. It is also easy to see how in disease or malformations of the turbinate bodies making pressure upon the septum, the pain may be referred to the eyes.

When we remember that the iris and ciliary body are supplied by branches of this nerve, we can understand why pain in the eye of nasal origin may be increased by using the eye for close work even when there is no refractive error. Not all affections of the eye associated with nasal diseases however, are of the reflex type. We may have muscular asthenopia or direct extensions of infection or retrobulbar neuritis of nasal origin.

It is not difficult to see how antrum of Highmore disease may cause aching of the upper teeth and facial neuralgia, and how crusts in the nose may produce a cough, and how sphenoid sinus disease may cause occipital headache.

The often repeated observation that non-suppurative nasal diseases and malformations produce reflex disturbances while suppurative diseases do not, can be explained on the theory that suppurative processes destroy the sensory nerve terminals while the nonpurulent diseases by irritation increase their reflex excitability.

Admitting that deductions from clinical evidence are not always correct, and regretting that we cannot positively demon-

strate the relation between a given pathologic condition and some distant disturbances of which the patient complains, we must take cognizance of the vast array of cases reported and consider the value of the presumptive evidence submitted. The cases generally reported run about as follows: The patient had complained of some trouble, we will say headache, for a long time which he had attributed to the eyes, or to nervousness, or to the stomach, or to overwork, but attention to the supposed cause had given no relief when some intra-nasal trouble was discovered. The correction of which brought almost instant and permanent relief of the headache. The physician and the patient naturally conclude, and not without reason, that the nasal trouble was the cause of the headache; but the facts are that no matter how severe, or persistent, or long continued the headache, or how many things had been done for it without avail, or how immediate and permanent the relief, it is not positive evidence that the headache was reflex, from and dependent upon the nasal trouble.

It is possible that the disappearance of the headache simultaneously with the correction of the nasal trouble may have been a coincidence, or it may have been due to loss of blood incident to a nasal operation, or it may have been due to some psychic impression, or to change of life, or change of diet, or change of surroundings, but when reports of these cases begin to pile up, or when they occur in his own practice, or in his own family, or in his own person, unless the physician is afflicted with a very serious form of mental strabismus, he must conclude that this is at least a field of investigation and that the evidence while not absolutely conclusive is worthy of respectful consideration. When we consider the nerve distribution, and remember that we are dealing with diseased parts, and that the disease may extend along the nerve trunk clear to the ganglion, the presumptive evidence becomes even more plausible.

At the risk of subjecting myself to the same criticism that others have enjoyed, I will enumerate a few of the special reflexes with a very brief report of illustrative cases, giving only essentials.

Case 1. Reflex from antrum of Highmore to the ear. A lady aged 30, complained for two years of pain in the ear which was supposed to be due to mastoid disease because of a previous suppurative otitis media. She was depressed almost to the state of melancholia. Examination revealed a non-purulent right antrum disease. After cleansing and ventilating the antrum the pain disappeared and the mental condition improved.

Case 2. Headache from antrum disease. A young lady

had complained of headache a long time. After incising the naso-antral wall in the middle meatus, a large quantity of thick tenacious mucous was blown out and the cavity filled with camphor-menthol. The headache disappeared with no other treatment.

Case 3. Antrum disease affecting the teeth. A man aged 45, complained of pain in the upper teeth which was so severe that he induced a physician to extract a number of teeth when it was discovered that the cause of the trouble was an acute antrum disease. This case is typical of many.

Case 4. Dental disease apparently producing pain in the ear. A young lady with chronic suppuration of left ear and cholesteatoma complained of pain in the ear radiating forward. After a successful radical mastoid operation the pain continued. She was referred to a dentist who found a cavity in the second molar beneath the margin of the gum. After this was treated the pain in the ear disappeared.

Case 5. Unerupted wisdom tooth causing pain in the ear. A young lady aged 20 complained of pain all over side of head which seemed to center in the ear. No cause for the pain being discovered in the ear and a little swelling and tenderness being found back of the second lower molar she was referred to a dentist who dissected out the tooth. The pain disappeared.

Case 6. Pressure between the middle turbinate and the septum, causing distress in the eyes. A seamstress aged 30 had complained of inability to use her eyes for several years. She had been refracted repeatedly without relief. Examination of the nose showed malformation of the middle turbinates, each hypertrophied and making pressure upon the septum. In this case coeain and suprarenal extract applied to the turbinates lessened the discomfort. The turbinals were removed and the patient has been able to do her work since with but little trouble.

Case 7. Disease of the turbinals apparently causing headache and vomiting. A physician aged 45 had suffered from headache with frequent vomiting and loss of appetite since his earliest recollection. He had noticed that the attacks were more severe when nasal obstruction was the greatest. An attempt to control them by the use of adrenalin was partially successful. Five years ago his turbinals were removed. A letter from the Doctor last week states that he has had no headache or stomach trouble since, gained twenty pounds in weight in a few weeks after the operation and does not know of a healthier man living.

Case 8. Ethmoiditis apparently causing eye trouble and

neurasthenia. An electrical engineer aged 30 had been suffering from uni-lateral headache and inability to use his eyes for several months. His business affairs worried him without apparent cause. He had reached such a mental state that he would cry over business matters which he imagined were going wrong. The case was sent to me to have the eyes examined. I found no particular trouble with the eyes but under the right middle turbinal there were small polypoid masses without evidence of sup-puration. After draining and ventilating the ethmoid cells, the headache and eye trouble disappeared and he soon regained his normal mental tone. He suffered a neurasthenic relapse when he received his bill but the attack was of short duration.

Case 9. Atrophic rhinitis with crusts in the nose, apparently causing a cough. A lady school teacher aged 35, had suffered for years from atrophic rhinitis. The crusts were large and difficult to remove. She had developed a cough which was persistent and aggravating and was threatening her position with the school board. The removal of the crusts relieved the cough but they persistently recurred and each time seemed to produce spells of coughing. So far I have been unable to stop the formation of the crusts but I have taught the young lady how to remove the crusts mechanically and so long as she keeps the nose free, she has none of her former trouble. She carries an applicator and cotton in her handbag and whether at school or at home she removes the crusts as soon as she feels any bronchial irritation..

Case 10. Cough apparently produced by an atrophic tonsil. A lady aged 55, had suffered from cough for several years with occasional attacks of spasmodic croup. She felt as though there were something in the throat and if she could get it out it would relieve the distress. Examination showed a hard, light colored, freely movable atrophic tonsil buried beneath the pillars. There was an area of redness around the tonsil and examination with the probe provoked a fit of coughing. Since the removal of the tonsil six years ago her cough has almost disappeared.

Case 11. Middle turbinate apparently producing stomach trouble and general nervous breakdown. A real estate dealer aged 58 was sent to me by a neurologist because of tinnitus. The patient had complained of loss of memory and inability to concentrate his mind upon his work. He had also complained of some form of digestive trouble that had caused him to consult a specialist in that line. I discovered that both middle turbinates were hypertrophied and were pressing on the septum and the lateral walls. These were removed with really astonishing results. When

the patient returned to the office the day following the first operation, he was feeling so much better than he had felt for months that he insisted upon having the second turbinal removed at once. This was eight years ago and the man has been conducting his business since without apparent inconvenience.

Case 12. Reflex from pharynx to the auditory canals. A lady aged 40, complained of distressing itching of both auditory canals with occasional attacks of eczema. She had had the usual treatment but the itching persisted. Examination of the tonsil showed concretions in the upper crypts with some redness about the upper part of the tonsils. Cleaning out these crypts greatly relieved the itching ears and the patient soon discovered that if she let her ears alone she did not have attacks of eczema.

Case 13. A foreign body causing an intractable cough. A boy aged 16 had had a persistent troublesome cough for several years. The parents knew that the boy had put a bean in his ear nine years before but did not think of the foreign body having anything to do with the cough. After removal of the bean the cough disappeared.

When a persistent cough associated with an uneasy sensation in the throat is relieved at once by the removal of some disturbing element in the auditory canal it seems only rational to suppose that this is another manifestation of the above mentioned reflex. As a practical application of our knowledge of these phenomena it seems not out of place to suggest that in cases of intractable cough not otherwise accounted for the auditory canal might be investigated as a possible etiologic factor.

The auditory-pharyngeal reflex is one that works both ways. A slight irritation in the side of the throat frequently causes a tickling in the ears, and a distressing itching of the ears is often caused apparently by disease of the tonsil.

The cases reported by no means illustrate all the reflexes which we encounter, nor are these cases in any way unique, but are only reported to call attention to the conditions which the rhinologist is constantly meeting.

Ten years ago I predicted that during the next decade the greatest advance in medicine would be along the line of reflexes; that we would become better acquainted with the more remote as well as with the direct cause and result of disease. I was mistaken, but I will now say that I believe the greatest opportunity for future advancement is in the investigation of the relations to and dependance of one part of the body upon another; I will also express the opinion that while the area supplied by the trifacial

nerve is important it is but a small part of the field that should be more carefully investigated.

THE MANAGEMENT OF THE NERVOUS CHILD.

M. L. PERRY, M. D., Parsons, Kansas.

Presidents Address, Medical Association of the Southwest, Oklahoma City, Oct. 10, 1911.

My first duty at this time is to express to you my keen sense of appreciation of the honor you have conferred upon me in making me president of this association. I feel that it is an honor calculated to satisfy even the most ambitious. But this like all positions of preferment and trust carries with it certain obligations and responsibilities, and prominent among these is the presentation of a presidential address. A constant realization that this responsibility was resting upon me has disturbed my peace of mind in no small degree for the past twelve months.

In casting about for a subject for such an address one is naturally inclined to keep within the bounds of his own special field of work, where it is reasonable to suppose his knowledge is greatest and his experience wider and more varied. I have endeavored, however, to avoid drifting into a too narrow specialism but rather to select a neurological topic of practical importance and wide general interest, and have therefore chosen for my subject, The Management of the Nervous Child.

The present trend in medicine is decidedly in the direction of prophylaxis, and there are few if any fields of endeavor that promise more in the way of prevention of disease than that offered by the proper care and management of nervous children. It will be generally admitted, I believe, that in recent years those diseases referable to the nervous system have shown the greatest relative increase. This is particularly true of the so-called functional neuroses, and according to the teaching of some of the most progressive neurologists, notably Freud and his followers, the beginning of this special type of disease can in most instances be traced back to incidents and experiences of childhood. It has been very truly said that the nervous child is father of the neurotic and neurasthenic adult, but granting this potentiality it is also true that proper care during the developmental period will often prevent the occurrence of actual disease at a later date. It is not alone the functional nervous conditions whose seed is sown in early life but many preventable organic affections originate then or develop later on a ground work of nervous instability

acquired in infancy or during the first few years. Preventive medicine has necessarily a pedagogical as well as medical aspect and this is especially true in the domain of pediatrics. A large percentage of the preventable diseases of children, particularly those of a nervous character, are due primarily to parental ignorance or neglect. Therefore, he who would successfully cope with the problem of the proper management of the nervous child must be a teacher as well as physician.

In the present discussion I shall use the word nervous in a broad sense, and will include under the term, nervous child, several types differing from one another in some particulars but all showing evidence of more or less deviation from the evenly balanced, well adjusted, normal nervous system. I shall include in this category:

1. The precocious child with its highly organized but poorly balanced nervous mechanism, who is capable of rather extraordinary mental effort along certain lines but prone to an early break down.

2. The quick, alert, restless child whose nervous system appears to be hypersensitive, whose mental faculties are so active that concentration is difficult and who is largely reflex in type.

3. The shrinking and abnormally timid child who is weak in nerve force and therefore easily exhausted.

4. The backward child who is slowed up mentally either on account of defective organs of special sense or an inherent difficulty in correlating sense perceptions and forming ideas.

There are certain traits common to all these types. They are all intensely emotional, the emotions being easily aroused and poorly controlled. They are quick tempered and prone to give way to strong passions such as hate, jealousy, anger, etc., but their outbursts of passion are usually short lived. Many children of this type are poor sleepers and are especially inclined to develop high fever from slight causes and are predisposed to convulsions and delirium when ill.

In the care of such children the influence of nutrition and dietetics is of paramount importance. Malnutrition is a potent factor in the development of nervousness as well as aggravating the condition when it exists. Infants kept at the breast too long or bottle fed babies who do not receive a sufficiently nourishing diet or young children whose dietary includes little or no variety are very liable to develop rickets, a disease much more intimately associated with neurotic conditions than most of us realize. Hoppe states that fifty per cent of idiotic children are also rachi-

tic. Thiemich in a recent publication lays great stress on the influence of malnutrition in the development in certain serious nervous disease in young and delicate children. He says, "There is no question but that many cases of epilepsy, idiocy, etc., which appear to be idiopathic have their beginning or ground work laid in a state of faulty nutrition in infancy which admits the development of a general infection with local inflammatory processes in the central nervous system." A similar quotation may be cited from Lugaro's recent work, *Modern Problems in Psychiatry*. He says in reference to infantile cerebropathies, "The infections which arise in the first years of life, and especially the inflammations of the gastro-intestinal tract—the result of unsuitable alimentation during the lactational period—are the most important factors in determining the majority of cerebropathies, and in this way a crowd of idiots, imbeciles, and epileptics, is produced who encumber asylums and are an enormous drain on the internal economy of the country as also on public charity." Measures directed towards favoring natural maternal feeding and providing the poor with the means for carrying out artificial feeding according to the most rational methods are suggested as the best means of prophylaxis. Errors in diet, more particularly gormandizing, a trait very frequently met with in neurotic children, may in those predisposed, cause convulsions with the possibility of irreparable injury, or may lead to a genuine epilepsy. It is really shocking to note how little care and judgment are displayed by the average parent or nurse in the feeding of infants and young children. Gross indiscretion is very frequent as illustrated by the history of a little patient seen only a few days ago. A child who had previously shown serious nervous symptoms was allowed at the tender age of two years to help himself to a basket of green apples which the mother was preparing for table use. Is it surprising that this child had a severe convulsion during the following night or that he is now a victim of epilepsy? This is an instance of simple parental ignorance of the danger incurred as the mother is of ordinary intelligence and appears devoted to her children. A timely word of warning might have prevented disastrous consequences. Too often, however, the physician is not consulted until the damage is done, and it is then very much like locking the stable after the horse is stolen. The habit of allowing children to eat piecemeal is a pernicious one and often leads to serious gastro-intestinal disturbance. To those who may think that an unnecessary emphasis is being laid upon this subject I will simply say that because the average healthy child seems to display a

gastronomic tolerance little short of that commonly attributed to the goat it does not follow that the nervous and therefore exceptional child can practice the same habits with impunity.

In childhood the lower nervous centers are normally much less under the control of the higher or psychic sphere than in adult life, owing possibly to the fact that certain parts of the tangential or association fiber system is not fully developed until after puberty, and in the child of neurotic temperament this deviation from the adult type is more pronounced. On account of this lack of control over the lower centers the nervous system in such children responds more readily to stimulation and there is a greater tendency to the formation of habit. Convulsive attacks may result from prolonged or severe peripheral irritation and tics or habit spasms often develop in nervous individuals from such irritations as errors of refraction, conjunctivitis, decayed teeth, phimosis; etc. These reflex spasmodic attacks when acute, yield readily to proper treatment but if neglected may on account of a morbid habit-forming tendency, become quite intractable and persist throughout life. The first indication in their treatment is of course to remove the source of irritation. This of itself is not always sufficient to bring relief, and the habit having been formed the spasms continue. In all such conditions it is advisable to resort at once to the use of such drugs as are calculated to reduce the heightened sensitiveness of the nerve centers. For this purpose the bromide of soda in small doses has proven, in my hands, more satisfactory than any other drug. In this connection I cannot refrain from saying a word regarding the wide spread belief in the efficiency of circumcision for the relief of spasmodic conditions in general. I see many patients in whom this operation has been done or advised without any rational indication for it. It may be desirable that all male children be circumcised, but to hold out any hope of relief from such an operation when there is no real irritation about the parts, such as phimosis, adhesions, or retention of secretions, is unwarranted and can only bring disappointment.

It is probably in the emotional sphere that the nervous child presents the widest variation from the normal. In this direction lies one of his greatest dangers, and for his protection there is need of most careful watching and guidance. The influence of the emotions on the general bodily health is enormous and every profound emotional disturbance has its accompanying physical effect. We know very little of the exact nature of the physical changes resulting from violently aroused feelings but that marked vaso-

motor disturbance may result is conclusively shown by the suffusion of the face that accompanies a sense of shame and the blanching of the skin in fright. Such emotions as grief, fear, and violent anger have a decided effect on the digestive apparatus and kidney elimination and no doubt influence other glandular secretions. The nervous child is a constant prey to a wide range of emotional excitement and has little power of control over his feelings. According to Guthrie, fear, of all the emotions, is the one most calculated to produce lasting effects upon a neurotic child, and it is exactly this feeling of fear to which the average child is most frequently subjected. To check his crying he is threatened with the dog, the boggy man or the dark, and frightful tales of ghosts and the supernatural find their way into many a nursery. This subject assumes a very much more important role when viewed in the light of the more recent teaching on the genesis of hysteria, neurasthenia, and psychasthenic states. It is now held by many neurologists that the origin of these diseases is very often to be found in some emotional or psychic shock experienced by the individual of nervous temperament during childhood. In a discussion of fundamental states in psychoneuroses Sidis, referring to such states in general says, "The attacks can be traced to mental trauma, emotional shocks, and especially to experiences of early childhood." This is in line with Freud's theories with which you are probably familiar and which are too complex to discuss in the time at my disposal. I can only mention in passing, that this author emphasizes strongly the part played by psychic traumas of a sexual character occurring in the young in the production of the functional neuroses of adult life.

Let us now take a glance at conditions surrounding and affecting child life under our present day civilization. I will leave out of consideration the vicious social states incident to the overcrowded slum districts where the children of the poorest classes lead a life altogether peculiar to their environment, but will consider the life of the average child in the average American family. How different it is from that of a generation or two ago. The average boy of ten today has been about more, seen more, felt more, and reacted more to environmental stimulation than his father had at twenty-five. He meets with new sensations on every side and keeps hours which would have been considered an actual dissipation for his grand-father. Every village has its quota of nickel picture shows and our cities are literally overrun with them where children of tender age congregate to view realistic pictures of thrilling melodrama or shocking tragedy. We

forget that to the inexperienced and unstable youthful mind stage tragedies are very real indeed. I do not want to be misunderstood as I do not condemn the moving picture, per se, which can be utilized as an excellent form of entertainment and instruction, but I deplore the very general use of unsuitable views and condemn the practice of the indiscriminate sending of all types of children to these places for entertainment which is too often chiefly an emotional thrill. At home the child is pushed into the foreground and any tendency to precocity is encouraged as a mark of genius. Such a life is not altogether wholesome for the normal, vigorous, and healthy child, and is a serious menace to the unstable and neurotic. One need not be an alarmist to see the danger ahead for these unstable children, and unless parents and those having to do with their care can be made to realize the gravity of the situation and exercise more discrimination and judgment in their management we shall reap a bountiful harvest of hysterics and neurasthenics, in the course of a few decades. The remedy lies in a plainer, simpler, and less strenuous life for children of this type, with more attention paid to their physical development, more regular hours, and more time for sleep.

There is a crying need of reform in our educational system. A more thorough inspection of school children by physicians or someone competent to detect defects and disease should be made, and school authorities should recognize the necessity of special class work in the public schools for defective children not ordinarily classified as feeble-minded. Such children should be given more manual training and be subjected less to the nerve-racking process of being forced to keep up with the fixed work of a rigid curriculum, planned for normal children. Dr. G. Stanley Hall in his comprehensive work on adolescence advises that they should be trained more in the use of the larger or fundamental muscles connected with physical strength, and less in the use of the finer or accessory muscles which come into function later and are chiefly associated with psychic activity. One of the difficulties of this problem lies in the failure of parents to recognize the varying limitations of their children and to realize that not all have the mental capacity and nervous stability equal to the strain incident to higher technical education. Nervous children are laboring under the handicap of an inherent weakness and should not be sacrificed to the ambition of their parents. Parents should be warned of the danger of attempting to force such children into the stress necessarily associated with leadership in our present day strenuous life. They should learn that it is far better for their

child to be a healthy and happy hewer of wood or drawer of water than a neurasthenic wreck who may have achieved high scholastic attainments.

We hear much in these times of conservation of public resources and certainly the greatest asset of any nation is its children. No effort should be spared that makes for their mental and physical betterment for on their stability depends very largely the future prosperity and progress of the nation and the race. If the few thoughts contained in this paper shall be the means of preserving the health and happiness of even a single one of the many nervous children in our land I shall feel that they have not been presented in vain.

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The Health Master.—Mr. Samuel Hopkins Adams, the man who wrote the article, "The Great 'American Fraud,'" in Collier's, a few years ago, has a continued story now appearing in the Delineator, "The Health Master,"—experiences of a young man as "Chinese doctor" in a private family.

Under peculiar circumstances Dr. Strong met a Mr. Clyde, and was engaged to look after the health of Mr. Clyde's family. The way Dr. Strong studies the children of the family, looking after their play, their habits, their health and nutrition; the way he looks after their home surroundings, their school surroundings, the surroundings of the farm which produces their milk, etc., is entertaining and educational.

The story is a strong advocate of medical inspection of schools, of proper enforcement of health laws and regulation in the community and in the home.

Mr. Adams has placed his instructive story in a magazine which is read by the mothers of the land, and if we hear mothers asking about adenoids, post-diphtheritic paralysis, measles, whooping-cough, unclean cow stables, flies, insanitary sewers, unventilated schoolrooms, and the like, we must attribute part, at least, of the good work, to the able pen of one of the ablest of literary allies of modern scientific and preventive medicine.

The suggestion is often made that the public be educated on health matters by articles in the lay press. When we prepare these articles let us make them entertaining as well as instructive.—Journal Michigan State Medical Society.

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For Sale.—Static Machine. Nelson, 24 Plate in good condition. Dr. Herbert M. Webb, Humbolt, Kansas.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

ASSOCIATE EDITORS: J. E. SAWTELL, CHAS. S. HUFFMAN, O. P. DAVIS.

Subscription Rates: \$2.00 per year, 20c single copy. Advertising rates furnished promptly on application.

The Journal was established in June, 1901, by a publication committee at Topeka. In May, 1903, Dr. G. H. Hoxie was elected editor and served four years. In January, 1904, it incorporated the *Welch Medical Journal*, owned by Drs. W. H. Graves and G. K. Purvis, and the *Western Medical Journal*, owned by Dr. A. J. Roberts, of Ft. Scott. In March, 1909, it incorporated the *Wyandotte County Medical Journal*, owned by Dr. James W. May. It is now printed in Kansas City, Kansas, and appears the first of every month. Correspondence should be addressed to the editor. Editorial office, 501-2 Husted Bldg., Kansas City, Kans.

LIST OF OFFICERS.—President, Dr. J. T. Axtell, Newton; 1st Vice-President, Dr. H. G. Welsh, Hutchinson; 2nd Vice-President, Dr. G. M. Gray, Kansas City; 3rd Vice-President, Dr. G. W. Anderson, Beverley; Secretary, Chas. S. Huffman, Columbus; Treasurer, L. H. Munn, Topeka; Librarian, S. G. Stewart, Topeka.

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EDITORIAL

Attention is called to a communication from Dr. L. O. Nordstrom, secretary of the Golden Belt Medical Society in another column of this issue on a subject in which we are or should be vitally interested. We have passed the backward stage when it was the custom to wait until office seekers had been elected and then humbly ask for medical laws to be passed that would help us none, but the public a great deal. We will find out before election how legislators (if elected) will perform and if the answer is against us the time to help legislate will be then and not after the votes are counted.

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The clinical Congress of Surgeons of North America will meet at Philadelphia, November 7, to 16. This will be a fine opportunity to see an abundance of surgical clinics by some of the worlds greatest stars. An attractive program has been arranged, in which there is not an idle moment. The first one held a year ago in Chicago was successful in every particular. For the amount of work done in a small space of time these clinic weeks are unsurpassed.

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The House of Delegates of the Washington State Medical

Society at their last meeting passed a resolution to expel any member found guilty of secret fee-splitting. It certainly is too bad that a state society should find it necessary to resort to such drastic measures to get rid of this evil. On the other hand from the discussions in lay magazines, medical societies and medical journals it would seem that a large number of other state societies could profit by the example.

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Whats The Matter With Kansas? In an editorial in the Journal of the A. M. A., October 21, 1911, the above question was asked. It was occasioned by the fact that "Professor" Samuels of Wichita, a "quack" of the worst type was still working his graft without molestation of the authorities. But there is nothing the matter with Kansas, at least in this particular instance, for Dr. S. J. Crumbine, secretary of the State Board of Health, has been gathering evidence for some time to present at the trial of the "Professor" which will take place shortly. Charges of violation of the Food and Drugs Law having been filed some weeks ago.

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It may be of interest to know the law pertaining to registering in the State of Kansas from other states having reciprocal relations. It is herewith published together with the states who have reciprocity with Kansas. The secretary of the Kansas Board is Dr. H. A. Dykes of Lebanon.

RECIPROCITY.

10. Applicants for reciprocal registration, from states holding such relations with Kansas, shall make their applications on the endorsement blanks furnished by this Board, and the several requirements therein fulfilled. A verbatim copy of the applicant's license must be made on the Kansas endorsement blank, under No. 7, and certified to by the secretary of the state medical board from which it is issued, and upon receipt of the application, with all parts of the endorsement blank filled out, together with the reciprocal fee, which is the same as that the state from which the applicant comes requires of Kansas licentiates for reciprocal registration in the applicant's state, a certificate to practice medicine and surgery in the State of Kansas will be issued by the Board unless the application should be rejected for cause. Kansas reciprocates on a basis of examination since 1901, and on diploma prior to 1901, with the following states: Alabama, Colorado, Delaware, District of Columbia, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Minnesota, Missouri, Nebraska, New Hampshire, New Mexico, New Jersey, North

Carolina, North Dakota, Ohio, South Carolina, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin and Wyoming.

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Following is a copy of a letter sent by the author to the secretary of the state examining boards. It is filled with such excellent counsel, that its publication is justified. Certainly this branch of the practice of medicine is so important and the practice of which requires so much skill (or should require it), that Dr. Hirst's efforts to improve the condition should and probably will meet with general approbation.

Dear Sir:—Of all branches of medical practice, it is generally admitted, I think, by those who have investigated the subject, that young physicians are least well prepared in Obstetrics and that lack of adequate preparation in this branch is productive of more harm to the community than a deficiency in any other.

The large maternity hospitals of the country receive every year a number of unfortunate women in child-birth, fatally injured by inadequate or unskillful medical attendance, and the infant is usually destroyed with its mother. These tragedies, therefore, must be comparatively frequent throughout the country.

Our medical schools have recognized of late, their defects in material and clinical equipment for teaching this branch and are earnestly endeavoring to remedy them.

The best schools of the country demand of their students personal attendance on a certain number of confinement cases before graduation, although the number is small compared with the requirements of Europe, where forty to fifty cases are required before a candidate is licensed to practice.

A committee of the American Gynecological Society last year recommended that at least six cases should be attended, under supervision, by each undergraduate.

In view of these facts, would you kindly submit to your board the inquiry whether the time has not arrived to act in accord with the practice of the older civilized states of the world in demanding of an applicant for a license to practice medicine, evidence of practical training in Obstetrics?

Very respectfully,

BARTON COOKE HIRST, M. D.

Professor of Obstetrics in the University of Pennsylvania.

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The State Board of Health has recently brought prosecution under the Food and Drugs Law, against a "Professor" Samuels of Wichita, who is treating some twenty odd different diseases

such as tuberculosis, bright's disease, etc., by instilling drops into the eyes of his patients. An analysis of his "drops" published in the Bulletin of the Board of Health, show it to be a solution of common salt in water with a little sugar added. Now the secretary of the Board of Health Dr. S. J. Crumbine, wants the names and addresses of all the people he can get who have been treated by "Professor" Samuels and have been disappointed in his treatment. The family physician very often gets admissions from his patients concerning these things and Dr. Crumbine wants them to testify in the case so that the prosecution will be successful. "Professor" Samuels will probably have an array of witnesses who will claim that the salt-water treatment cured them and it will be necessary to have witnesses to refute this testimony. We should do all in our power to rid the state of this man who preys upon the easily deceived public. Do your part and the state Board of Health will do theirs.

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Correction.—In the September issue of our Journal it was stated that "a committee from the state society visited Mr. Capper of the Topeka Capitol, and requested him to remove objectionable medical advertising". "He gave them scant courtesy and refused to do so." The editor was in error. The committee did visit the offices of the Topeka Capitol but did not see Mr. Capper personally but some other member of the Capitol's staff. However, Mr. Capper's attention has been called to the advertising in question, without avail. The advertisements are running just the same.

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SOCIETY NOTES.

The Southeast Kansas Medical Society held a very successful meeting at Parsons, September 26, 1911. There were 47 members and guests present.

The entertainment consisted of an automobile ride about the city and a banquet at the Matthewson Hotel. The Society was the guests of the Labette County Medical Society. The program was as follows:

"The Symptoms and Frequency of Chronic Appendicitis and Gall-Bladder Disease.—Diagnosed Stomach Trouble," Dr. J. R. Newman, Fort Scott.

"Personal Rights vs. Tuberculosis." Dr. S. J. Crumbine, Topeka.

"Contract Practice," Dr. J. N. Davis, Independence.

"Membranous Pericolitis," Dr. J. N. Jackson, Kansas City, Mo.

"Cholera Infantum," Dr. Mamie J. Tanquary, Independence.
Presentation of Clinical Cases, by the Parsons Doctors.

"Tincture Iodine as an Antiseptic," Dr. N. C. Speer, Osawatomie.

"A Discussion of Middle Ear Deafness and Its Causes," Dr. W. H. Graves, Pittsburg.

The Wyandotte County Medical Society opened its fall session October 17. Excellent papers were presented by Dr. Preston Sterrett on "Syphilis With or Without Salvarsan," and Dr. W. K. Trimble on "Salvarsan and the Wasserman."

The Northeast Kansas Medical Society held their semi-annual meeting at Kansas City October 26, under the presidency of Dr. M. T. Sudler. The following papers were read at the afternoon session: Adenoids and Tonsils, Dr. H. Redding, Some Experiences with Foreign Bodies in Conjunctiva and Cornea with suggestions Concerning Treatment, Dr. H. L. Alkire, The Prevention of Hernia and Adhesions After Operations, Dr. St. Elmo Sanders. Report of Three Cases of Pyosalpinx Complicated by Appendicitis, Dr. R. C. Lowman, Practical Value of the Wasserman Reaction, Dr. W. K. Trimble. The evening session was given over to Dr. C. F. Menninger who gave a paper on Pellagra with lantern view illustrations. The society was entertained at a six o'clock dinner by the Wyandotte County Medical Society. The Society will meet next February at Lawrence.

Medical Association of the Southwest.—The sixth annual meeting of the Medical Association of the Southwest was held at Oklahoma City, October 10-12. This meeting was the banner one in the history of the society, both in point of attendance and merit of the program and in the social features provided for the members and their wives.

The opening session was held at the Masonic Temple (as were other sessions) and was called to order by Dr. E. S. Lain, Chairman of the Committee of Arrangements. The address of welcome was delivered by the Rev. C. H. Jones and was responded to by Dr. Jabez N. Jackson. Dr. M. L. Perry then delivered the Presidents Annual address which appears in this issue of the Journal. Dr. C. B. Hardin read a paper on "Remarks on Ulcers of the Stomach and Duodenum," which was followed by a paper from Dr. A. L. Blesh on "Surgery of the Gall Bladder, and Ducts in Relation to Chronic Pancreatitis," Dr. L. Haynes Buxton

then read a paper on "Ocular Complications in Hysteria," after which the society adjourned to meet in sections.

On Tuesday evening Dr. A. H. Andrews of Chicago delivered an address on Trifacial Reflexes (which appears in this issue of the Journal), and Assistant Surgeon of the Marine Hospital Service, R. M. Grimm, presented an address on Pellagra illustrated with lantern slides.

The scientific work of all the sections was completed Thursday just before 5 o'clock, at which time the visiting members of the Association, accompanied by their ladies, were given an automobile ride over the beautiful boulevards of Oklahoma City, through the courtesy of the local profession. The party returning to the Masonic Temple at 6 p. m. where in the Banquet Hall a banquet had been prepared for all the visitors.

Dr. C. S. Bobo acted as Toastmaster and called upon Dr. Flavel B. Tiffany of Kansas City, Mo., to respond to "The Bushwhacker in Medicine," Dr. R. M. Grimm, Ass't. Surgeon Public Health and Marine Hospital to respond to "The Medical Man in Public Health;" Dr. Bacon Saunders of Fort Worth, Texas, to respond to "Flowers by the Wayside," and (Dr. Saunders gathered whole bouquets of them.) Dr. J. D. Riddell of Enterprise, Kans., next responded to the "Jayhawker in Medicine", (write Dr. Riddell for his Swede story), Dr. H. Moulton of Fort Smith, Ark., to respond for Arkansas.

Dr. Moulton said Arkansas had many things to be thankful for but above all that she was the mother of Oklahoma, Dr. F. H. Clark was then called upon to respond for Oklahoma, the sentiment being, "How Dry I Am."

The toastmaster then called the local profession and local visitors to their feet and proposed the following toast,

OUR GUESTS.

"To know, to esteem, to love, and then depart,
makes up life's tale to many a feeling heart."

The following officers were elected for the ensuing year:

President, Dr. A. L. Blesh, Oklahoma City, Okla.; Vice-Presidents, Dr. F. B. Young, Springdale, Arkansas; Dr. G. W. Robinson, Kansas City, Mo; Dr. W. H. Freeman, Lockney, Texas; Dr. W. S. Lindsey, Topeka, Kans; Sec'y-Treasurer, Dr. Fred H. Clark, El Reno, Oklahoma.

For Members of Executive Committee to Serve Three Years.—Missouri—Dr. C. W. Fassett, St. Joseph, Mo; Kansas—Dr. J. D. Riddell, Enterprise, Kansas; Oklahoma—Dr. D. A. Myers, Lawton, Oklahoma; Texas—Dr. Bacon Saunders, Fort Worth, Texas; Arkansas—Dr. E. H. Martin, Hot Springs, Arkansas.

SECTION OFFICERS.

Surgery.—Chairman, Dr. Bacon Saunders, Fort Worth, Texas; Vice-Chairman, Dr. J. F. Binnie, Kansas City, Mo; Secretary, Dr. Howard Hill, Kansas City, Mo.

Medicine.—Chairman, Dr. W. T. Wooten, Hot Springs, Arkansas; Vice-Chairman, Dr. T. E. Saunders, Shawnee, Oklahoma; Secretary, Dr. C. W. Fisk, Kingfisher, Oklahoma.

Eye, Ear, Nose and Throat.—Chairman, Dr. H. Moulton, Smith, Arkansas; Vice-Chairman, Dr. M. F. Jarrett, Fort Scott, Kansas; Secretary, Dr. J. W. May, Kansas City, Kansas.

The Executive Committee recommend that for the coming year arrangements be made for a three day session. The Committee further recommend that each morning and evening session be arranged for General Discussion with appropriate papers presented and that the afternoon sessions be devoted to scientific work by each section meeting separately.

The Committee also recommend that for all future meetings, the officers in arranging the program be instructed to eliminate everything but the scientific papers and such business as is necessary to properly conduct the affairs of the Association.

On Motion duly seconded, carried, the above recommendations were accepted and adopted.

The Society will meet next year at Hot Springs, Arkansas.

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NEWS NOTES

The Western Surgical and Gynecological Association will meet in Kansas City, Mo., Dec. 18-19.

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At the last examination of the State Board of Medical Examination and Registration held at Topeka, June 13-15, 1911, the number of candidates examined was 66. Of these 46 passed and 20 failed including one chiropractor.

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The Southern Medical Association will hold its annual meeting in Hattiesburg, Miss., November 16-18.

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Dr. W. L. Gleason has succeeded to the practice of Dr. Charles F. Kyser, Conway Springs. Dr. Kyser is reported to be seriously ill in St. Francis Hospital at Colorado Springs, Colo.

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Fire in Greenleaf, September 5, destroyed the office of Dr. Z. Hosea Snyder, who suffered a loss of \$5,000.

Dr. William W. Minick has been elected mayor of Wichita.

Dr. James Stewart has been appointed city physician of Topeka.

Dr. H. H. Brookhart of Scammon has moved to Columbus.

Dr. Ansel M. Edison, Topeka; has retired from practice and will make his home in La Porte, Tex.

Dr. R. S. Magee of Topeka was recently elected President of the Atchison Topeka and Santa Fe railroad Medical and Surgical Association.

Drs. L. H. Munn and J. W. Freeman were elected delegates to the American Association of Railway Surgeons which met in Chicago, Oct. 18. The next annual meeting of the Santa Fe doctors will be held at Albuquerque, N. M., in Oct. 1912.

The dedicating exercises of the Eleanor Taylor Bell Memorial Hospital were held at Rosedale, Kansas, Monday evening, Oct. 23. There was a reception which was followed by speeches by Chancellor Strong for the University of Kansas, of which the hospital is a part, Rodney E. Elward representing the Board of Regents, Dr. S. J. Crumbine, Dean of the Medical Department, Kansas University and Dr. M. T. Sudler Associate Dean. Refreshments were served by the nurses of the training school.

Dr. Hugh Wilkinson of Kansas City, Kansas suffered the loss of his father, who died at Seneca, Kansas, Oct. 25, 1911, from typhoid fever.

Ether Day.—The sixty-fifth anniversary of Ether Day was celebrated at the Massachusetts General Hospital, Boston, on Monday, October 16th. The first public demonstration of surgical anæsthesia took place in that hospital, and the custom of observing Ether Day at the hospital has been in vogue for a number of years. Dr. Simon Flexner, of the Rockefeller Institute, delivered an address on the Biological Basis of Specific Therapy. Dr. Henry P. Walcott presided, and in a brief address referred to the fact that another anniversary was being observed, namely, the centenary of the Massachusetts General Hospital. Among those present at the exercises was Dr. Samuel A. Green, the oldest living graduate of the hospital.—N. Y. Medical Journal.

A Hospital for Pellagra.—Atlanta, Ga., is to have the distinction of establishing the first hospital in the world entirely devoted to the care of patients suffering from pellagra. This institution, which is an annex to the Tabernacle Infirmary, will be opened on September 11, and offers accommodations for twenty-one patients.—*Medical Fortnightly.*

Special Study of Pellagra.—The Department of Tropical Medicine of the New York Post-graduate Medical School is organizing an expedition to investigate pellagra in the Southern States. The work will start in the spring of 1912 and is made possible by the gift to the institution for this purpose of \$15,000 by Colonel Robert M. Thompson and Mr. J. H. McFadden.—*N. Y. Medical Journal.*

Case Reports.

Rupture of the Uterus.—C. Goodman, New York (*Journal A. M. A.*, October 14), after noticing the usual causes of uterine rupture, reports a case which he concludes was due to cervical implantation of the placenta, the first case of this kind, he thinks, reported in this country. The case was one of pregnancy at the fifth month and was diagnosed from the symptoms as rupture of an ectopic pregnancy. The reasons offered for the pathologic diagnosis are given as follows: "1. The uterus is divided into two great portions, a well-preserved, thick upper portion, and a very much thinner lower portion. The placenta is attached to this lower portion. Neither macroscopically nor microscopically can evidences of placental attachment, such as retained villi, decidua or giant cells, be demonstrated in the body of the uterus. 2. The point where the placenta appears macroscopically corresponds to a line drawn between the insertion of the uterine vessels on either side, and also between the anterior and posterior peritoneal reflections. Both of these landmarks indicate the level of the isthmus and the internal os. 3. The placental attachment was demonstrated in contact with cervical glands." A brief review of the foreign literature of similar cases is given.

Maggots in the Ear.—To the Editor: With reference to a report on "Screw Worms in the Ear" (*The Journal A. M. A.*, Oct. 7, 1911, p. 1207), I wish to report the following: A patient showed me a maggot which, he said, had crawled out of his left ear during the night; he also complained of sleeplessness for the

two preceding nights on account of pain in his ear. I discovered a white, wriggling mass behind the isthmus of the external canal. After several unsuccessful attempts to remove this mass by various methods, I resorted to a 4 per cent. solution of cocain, which removed eight maggots, making a total of nine from one ear. The entire canal and membrana tympani were severely inflamed. Recovery was uneventful.

JONH A. HUTH, M. D., Natronal, Pa. Journal A. M. A.

—o—
Doctor J. W. May, Editor Journal Kansas Medical Society,
Kansas City, Kansas,

Dear Doctor.—I wish to report a case that seems to me of some interest. Some time since one of my patients, a farmer, came to me and told me that he wanted his oldest boy circumcised. After talking a few moments he said that he guessed I had just as well circumcise all five of his boys—ages 7, 5, 3, 2 years and 2 months.

I operated on all five of the youngsters the morning of August 7, 1911, having no more trouble than one would expect from five such robust, healthy children.

The more or less remarkable, at any rate interesting, feature of this case is the fact that the father came to have the operation performed on all the babies at once, showing thereby an interest in their welfare and an intelligent handling of the situation only too often found wanting. It shows how the teachings of the medical profession and the educators in general are bearing fruit when one man will have such a wholesale job done at considerable cost just because he realizes the importance of such operation on the after life, health and conduct of his children. This father did not hesitate to employ a trained nurse to look after the patients and to pay well for an anesthetist.

All except one of these children had foreskin adherent to the glans, with accumulated hard masses of smegma imbedded beneath and with the glans in an aggravated state of irritation. Each child had a very long foreskin.

The father told me that he had noticed the boys "digging" and "pulling" at themselves and he had at once suspected what was causing the irritation. He deserves considerable praise for taking hold so promptly, doing the unconventional thing (unconventional at least out here in the country) and giving his children the chance to grow up without such physical incentive toward the forming of bad habits as is a long foreskin.

Yours very truly,

LLOYD A CLARY.

COMMUNICATIONS.

Salina, Kansas, Oct. 17, 1911.

Editor, Kansas Medical Journal.

Dear Doctor:—The great and commendable work that is being done in this country by representatives of public sentiment in exposing grafts of all kinds, in having the grafters convicted and their methods of capturing their prey made public, merits the earnest endorsement and support of the medical profession.

By reason of inadequate legislation, and a deep and abiding ignorance and lack of discrimination of the public on matters of a medical nature, various forms of grafts are still flourishing. In view of these facts the medical profession in Kansas has awakened to a feeling of responsibility relative to the problems which are of a medical nature and which concern the general public welfare.

Apparently, the steps to be taken in the direction of suppressing the grafters in medicine, and in which the profession as a whole can take part, are: first, to earnestly request and insist on the leading newspapers and periodicals not to become parties in the grafts by allowing grafters to use their columns for advertising purposes to capture their victims; and second, to encourage legislation incompatible with the successful prosecution of any business which has for its sole object material gain without any regard for the physical and economic welfare of its patrons.

The Golden Belt Medical Society at its meeting at Solomon on July 1, 1909, passed resolutions of protest against the Topeka Capital and other leading newspapers, and denounced the policies of the newspapers carrying advertisements of fakirs and grafters. Subsequently at the Junction City meeting July 6, 1911, similar resolutions were adopted with the addition that any man conducting and dictating the policies of a paper who would allow his paper to become the medium for grafters, would not be a safe man to place in charge of a public office, particularly the office of the chief executive of the great state of Kansas.

Copies of these resolutions were mailed to practically every physician in the state (about 2650), and although no requests were made for replies, numerous letters came from doctors in all parts of the state heartily endorsing the action of the Golden Belt.

The interest manifested by the profession was reported by the secretary at the Herrington meeting, Oct. 5, 1911. This provoked a very generous discussion, which was concluded by the appointment of a committee of seven, each to visit his neighboring county societies, and in person present the matter of united action against

any aspirant for the office of Governor who is in sympathy with the irregulars, incompetents and the unscrupulous in medicine, and who would consider personal gain preferable to the honest consideration of the general public welfare.

As physicians of the State of Kansas, and in the interests of public welfare, we should not confine our efforts exclusively to the support of a man for Governor, who is in sympathy with legislation favorable to effective service of the guardians of public health, but we should also look to our representatives in the legislature, and urge them to take into account the conservation of our greatest natural resources the life and health of our people. And let us not forget to urge our representatives in Congress to support the "Owen's Bill" providing for a National Health Bureau. To our political representatives and to the voters let us point with pride to the enviable record of Dr. Wiley, the pure food expert, and to our own Secretary, Dr. Crumbine, who has done more than any other one to place our State Board of Health on the present high plane of efficiency,

Correspondence with the secretaries of all the medical bodies in the state is desired, and all communications from physicians concerning the above stated questions will be gratefully received by

Respectfully yours,

L. O. NORDSTROM, Sec'y.
Golden Belt Medical Society.

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The following personal letter to the editor tells of conditions to be found in the practice of medicine in Alaska, and shows the general knowledge or rather special knowledge required in all departments of practice when the services of specialists are not to be had.

Ketchikan, Alaska, Oct. 6, 1911.

Dr. James W. May, Kansas City, Kansas,

Dear Doctor:— When I saw you last summer I promised to let you know something of the practice of medicine in Alaska. Since coming home I have been so busy that I have had little time for writing but today as it is somewhat quiet, I thought I would give you an account of one day's work. You must not judge from this that all days are like this one; some are more trying because of duties that must be performed, others are marked with less work. This, however, is a fair sample, and will give you an idea of what we have to do and from it you may better understand how we have to keep reading and studying to keep abreast

of things. We do no fracture work without first making a radiograph. (I am speaking of we. You can see from the letter head that my brother is with me.) We also have to do our own microscopic and blood counting work, etc., in fact we have to do special work along all lines. That may sound ridiculous to you, nevertheless it is true for the nearest specialist is hundreds of miles away. During this day some of the cases were duplicated, I will merely give the diseases we had to care for, and the conditions we had to treat.

1. Alcoholism. This is a condition we have much of in this country.

2. Congestion of lower lobe of right lung.

3. Urticaria.

4. Appendicitis. This is a case we operated on a few days before and had to dress daily it being a gangrenous appendix.

5. Ruptured urethra. Another case operated on and demanding daily attention.

6. Compound fracture of both bones of the right leg. Dressing.

7. Spiral fracture of left tibia. Changing splints.

8. Wound caused by falling on oar-lock, dressing.

9. Burn of left arm and leg. Dressing.

10. Tested eyes and fit glasses.

11. Blood count.

12. Pulmonary Tuberculosis.

13. Amenorrhea.

14. Fracture of both bones of the fore arm. Call.

16. Dressing finger torn off in cannery.

17. Prostatitis.

18. Testing blood pressure of patient.

19. Treat case of tic-douloureux.

20. Mitral insufficiency.

21. Metrorrhagia.

22. Interstitial Keratitis.

23. Facial paralysis.

You see we have a variation. But we are enjoying our work. When we cannot find enough here to keep us busy we will go elsewhere for we want to be at work.

I suppose you had a fine time while on your western trip. Have you given thought to the trip to Alaska yet? You know you are to come up here some time. Tell you I would like to see some of you fellows. This time last year I was headed for the east and I have a kind of "hankering" to see it again. I am planning

to go back again in three years. You see that doesn't seem so long to us fellows who are so far away from home.

With best wishes to you and all the other people I know there and requesting that you give them my best, I am,

Sincerely yours,

J. L. MYERS.

—o—

Circular issued by the American Orthopedic Association and the American Pediatric Society in reference to acute epidemic poliomyelitis, and addressed to health authorities and boards of health.

Anterior poliomyelitis is, so far as known, a communicable disease, being communicated from one patient to another and also by means of a third person. It occurs in epidemics and tends to spread along the lines of greatest travel. There is reason to believe that it is prevented from spreading by quarantine, and with the very great prevalence of the disease in the summer of 1910 it is the opinion of this committee that it is essential that it should be made a reportable disease in all states in order that its presence may be detected and its spread guarded against.

Of particular significance are the so-called abortive cases, where indefinite ailments occur in children in communities where frank paralysis also exists. These abortive cases of infantile paralysis are undoubtedly a source of infection, and their record and study is of much importance. In a community where cases of infantile paralysis occur cases of illness with sudden onset of fever and meningeal symptoms should be closely watched and regarded as possibly infectious. In such cases even recovery without paralysis does not establish the fact, that the case was not abortive infantile paralysis.

All cases of infantile paralysis should be strictly quarantined, sputum, urine and feces being disinfected, and the same rigid precautions being adopted as in scarlet fever. This quarantine should, in the opinion of the committee, last for four weeks in the absence of definite knowledge as to when the infection ends. Children from infected families should not be allowed to go to school until the quarantine is abandoned. The transportation or transfer of acute cases in public conveyances should be strictly forbidden. It would be very desirable to adopt provisional quarantine measures in suspicious cases in a community where an epidemic prevails. The report of all cases of infantile paralysis to the public health authorities should be enforced by law, and all deaths from this should be properly described and registered. A careful study of

epidemics by public health authorities is strongly advised.

(Signed) ROBERT W. LOVETT, M. D., Chairman.
HENRY KOPLIK, M. D.
H. WINNETT ORR, M. D.
IRVING M. SNOW, M. D., Secretary.

MISCELLANEOUS.

At what Age Should the Education of the Deaf Child Commence?

—Yeonsley (British Journal of Children's Diseases) is of opinion that the oral education of the deaf child should commence at the age of three years, and that the ultimate success of deaf education would be greatly enhanced thereby. The practice in different countries varies, but the tendency is to lower the age of admission to schools for teaching the deaf to speak. Speech plays an important part in the development of the intellect, and therefore should be begun early. There is a hereditary tendency to speech, and the deaf child should be given an opportunity to exercise it by being taught early by the oral method. The plastic brain period of the child is past at seven years, the usual time when teaching of the deaf is begun: the earlier teaching of young children should be by kindergarten classes especially adapted for the deaf, and be done by experienced teachers.—Charlotte Medical Journal.

STOP YOUR FRETtin'.

When things don't come along your way,
Can't hurry 'em by frettin';
If clouds o' care obscure your day,
Can't chase 'em off by frettin'.
Your tears jest irrigate your woe
An' freshen up an' help it grow—
Don't wash it out o' sight, an' so
There ain't no use in frettin'.
No matter what your cares an' woes
Don't humor 'em by frettin';
If hard luck aims her heavy blows,
Strike back—don't go to frettin'.
Screw up your nerve an' hold your grip
An' keep a frozen upper lip,
Fur anything on earth kin whip
The man that gits to frettin'.

--James Barton Adams in Denver Post.

Reportability of Syphilis and Gonorrhea.—Frances M. Greene, Cambridge, Mass. (Journal A. M. A., September 23), refers to the action taken by the California Board of Health in declaring syphilis and gonorrhea reportable diseases as the most important step in relation to this subject as yet taken in this country. The author reviews the European legislation on the subject and describes the results as remarkable where—as in the Scandinavian countries—the measures have been so strictly enforced so as to warrant control of every case. She defines the relation between the physician and society as widely different from that of twenty years ago, and urges that the public should be educated to realize the danger of venereal diseases. Where these diseases are reported both physician and patients are placed in a position of joint responsibility as regards the public health. Quackery in venereal diseases should be considered as a criminal offense and laws should be made which should eliminate this social disgrace. The position of the medical profession in this relation should be on the side of the law. The point is also brought out that the so-called reglementation has now been definitely proved a failure in the principal countries on the European continent, and the author believes that this fact should emphasize the advisability of placing venereal diseases where they belong, i. e., among the other infectious diseases.

Prayers on a Commercial Basis.—There was a New York woman who wrote prayers guaranteed to cure rheumatism, or other diseases when repeated. For fifteen cents she would write a prayer guaranteed to cure the specific disease for which it was written. She has been fined five hundred dollars. She now has the privilege of praying for a dispensation of the fine.—Medical Fortnightly.

For Sale. Static Machine. 24 plate Nelson in first class condition. All accessories, including new X-ray tube and Tesla-Odin Resodator.—Herbert M. Webb, M. D., Humbolt, Kansas.

The Doctor on the Witness Stand.—In an article of practical advice, not on expert testimony, but on the deportment of an ordinary physician on the witness stand, the Medical World says: Never permit yourself to take sides; simply tell the straight truth; it is up to the jury to form opinions as to the merits of the case, and it is not anybody's business what your personal opinion is. Do not tell a long story. Keep the attorney asking questions.

Answer each as tersely as possible and then stop. Study well beforehand any anatomic or physiologic points that will come up, and then you will not need to let any attorney frighten you by an apparent grasp of medical subjects. Tell nothing but what you know to be a fact. The attorney may try to tempt you into turning a guess into a state of fact, and then he will have the advantage of you. Never say that you read a certain book; say you have read parts of it, lest the lawyer expect you to be perfectly familiar with the whole book. Be polite, professional and courteous and demand the same consideration.

OBITUARY.

John Hughlings Jackson, M. D., consulting physician to the London Hospital and the National Hospital for the Paralyzed and Epileptics, died at his residence in London, at the age of 76. Dr. Jackson was known all over the world as a neurologist of wonderful attainments, and the discoveries he has made in this branch of medical science will make his name revered for centuries to come.

Charles Cornelius Payne, M. D., University of Kansas, Kansas City, 1907; a member of the Kansas Medical Society and for a time a lecturer of the faculty of his alma mater; died at the home of his wife's mother in Lawrence, September 14, from the effects of a gunshot wound of the chest, believed to have been self-inflicted with suicidal intent, aged 38.

Tolman F. Andress, M. D., (license, Kansas, 1901); an eclectic practitioner for forty-three years; died at his home in Liberty, Sept. 10, 1910, from valvular heart disease.

Albert E. Gundry, M. D., Kansas Medical College, Topeka, 1894; of Junction City, Kansas; died in Christ's Hospital, Topeka, September 14, from carcinoma of the stomach, aged 45.

Alexander Hugh Ferguson, M. D., age 58, a widely known surgeon of Chicago, died Oct. 20, from diabetes. He was at the time of his death, professor of clinical surgery in the College of Physicians and Surgeons and had many other hospital appointments. His death removes from the profession a man of great attainments and will be mourned by all.

George W. Hogeboom, M. D., Berkshire Medical College, Pittsfield, Mass., 1864; one of the oldest practitioners of Kansas; sur-

geon of the Eleventh Kansas Volunteer Infantry with the rank of major during the Civil War; for several terms a member of the house of representatives and senate from Jefferson County; chief Surgeon of the Santa Fe System for fifteen years and organizer of the hospital system of that road; died at his home in Topeka, October 8, from pleurisy, aged 79.

George Schoonover (license, Kansas, 1901); said to have been the oldest practitioner of Anderson County; died at his home in Garnett, October 4, aged 78.

CLINICAL NOTES

A small erosion of the trachea may give rise to a distressing hemoptysis which differs from a hemorrhage from the lungs in that there are no lung symptoms, no loss of weight or constitutional symptoms and in that the bleeding occurs in small lumps of clotted blood.—*American Journal Surgery*.

A severe sore feeling in the throat is frequently complained of by nervous individuals. Close inspection will show numerous fine white spots surrounded by a red areola—herpes.—*American Journal Surgery*.

X-Rays in Acute Adenitis.—Jangeas, in *La Presse Medicale*, says that the use of the X-rays is the treatment of choice in tuberculous adenitis when it has not yet suppurated, and should be used as an adjuvant to operation in tuberculous abscesses and rapidly developing adenitis. The benignity of this treatment makes it acceptable to the patient and renders it easier to get him to submit to surgical operation. Its action is rapid and complete in non-suppurative cases. It depends on a reduction of the lymphoid elements, and in single glands is very rapid. When several glands form the mass the connective tissue of the periadenitis which joins them into one mass it is not so easily absorbed. When caseation has occurred and abscess has formed it is necessary to first evacuate the abscess through a very small opening and then to apply the rays in sufficiently strong doses to produce an immediate effect. Such a strong application is greatly superior to several weaker ones, which may cause an irritation favorable to the development of the swelling. The esthetic results obtained by this method are much to be preferred to the formation of scar tissue after operation, and the mass is affected throughout in such a way that the neighboring glands do not enlarge afterward, while, after operation, other glands may enlarge and the difficulty be repeated.—*Medical Standard*.

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PERSONAL RIGHTS vs. TUBERCULOSIS.

DR. S. J. CRUMBINE, Topeka, Kansas.
Secretary State Board of Health.

Read before the Southeast Kansas Medical Society, Sept. 26, 1911.

Ever since the time when God found that it was not good for man to live alone, and provided for him a helpmate, has man been dependent to a greater or less extent on his fellowman for the things and environment that makes life worth living and even possible.

The social fabric has become so complex, and our actions and doings so interwoven one with the other that what I do, or leave undone that I should have done, may affect the comfort or welfare of others far removed from my immediate abode. In order, then, that the general welfare might be preserved, organized society, or what we may call the state, has decreed that certain things or practices that might endanger the person or property, morals or health of the people may not be permitted. And thus the so-called police laws have been passed by the representatives of the people in legislative assemblage.

The property or person of the individual may not be harmed, as in the commission of certain crimes, the morals of the community may not be outraged, and thus gambling and the liquor traffic must be controlled, and above all the life and health of the people must be conserved, and thus Boards of Health are established and given large police powers. Food and drug adulteration are prohibited, and quarantine measures are devised for the prevention of disease.

The degree to which society has protected herself from those things which menace her well-being must mark the altitude in her struggle upward in civilization.

In the exercise of police power the state may quarantine persons suffering from or exposed to infectious and contagious diseases, may compel the abatement of nuisances, and may even go so far as to destroy property, if such property may reasonably be suspected of being a source of danger to the public health. Indeed, there seems to be no limit to the exercise of the police power for the protection of the public health, so long as such power is exercised in good faith, and is reasonable and not in conflict with generally accepted sanitary procedure.

Corporations are subject to health regulations, as well as individuals, it having been held in numerous cases, as outlined in Cooley's Corporation Limitations, "that the rights and privileges vested in corporations, by their charters, are placed upon the same footing with other legal rights and franchises of the citizens," and subject in like manner to proper rules for their due regulation, protection and enjoyment.

It must be said, however, that while it is unquestioned that the state has the right to make and enforce health regulations, it is extremely difficult at times to enforce them. The average free-born American citizen stoutly proclaims his personal rights to be paramount to that of the rights of the community in which he lives, and thus we note the continued litigation in the courts, by both persons and corporations, in which claim is made that their individual, or corporational rights is being infringed by these so-called police regulations of the state. It is worthy of note, however, that of recent years the higher courts have uniformly held that the rights and welfare of the general public is paramount to that of the individual in matters of morals and safety to personal property.

Much has been done in all the so-called civilized countries for the protection both of the person and property, and the morals of the people. But in matters of public health, the public conscience has been hard to arouse, particularly in the United States.

About thirty years ago the world began to be aroused from its stupor of centuries and to realize that one disease was killing one-seventh of all those who were born under civilization and was crippling as many more. And when in 1882 Koch discovered that this disease was due to a micro-organism, proving it to be infectious, but at the same time demonstrating it to be preventa-

ble, then it was that the first real concerted effort was inaugurated to stay the awful ravages of the "Great White Plague."

Tuberculosis is first a sociological and an industrial disease, before it is a medical one. That is to say, the conditions that favor the development and spread of the disease are social and industrial; and it is, therefore, manifestly the duty of the state to bring about such changes in the social and industrial conditions as may minimize the possibilities of the development and spread of the disease rather than rely on medical science to cure the ever increasing and on-coming army of infected.

As Woods Hutchison has so graphically declared, "Tuberculosis is one of the many *blessings* of the poor."

Another equally careful observer has clearly shown the relation that the daily wage bears to the prevalence of the disease. Just to the extent in which people are able to surround themselves with the necessities and comforts of life, in proper housing, warm clothing, abundance of wholesome and nutritious food, and sanitary environment, just to that extent are they fortifying their bodily resistance against infection. On the other hand, in mathematical proportion as these conditions are lacking does the disease prevail in all civilized communities.

Tuberculosis, is therefore, pre-eminently a disease of the poor, and it is manifestly the duty of the state to bring about such a change in social conditions and environment, for the relief of its poor, as is possible under our democratic system of government.

It is only in recent years that industrial concerns have made any special provision looking toward the safety of industrial workers in the matter of inhalation of dust, or noxious gases, or in the provision of adequate ventilation and light, which are so essential in the maintenance of a high state of bodily resistance. And thus many of the great and profitable industries have annually contributed their quota of thousands, as offerings upon the altar of American greed and avarice, victims to this insatiable monster, consumption.

Here, again, it is the manifest duty of organized society and the State to put into effective operation such laws as will adequately protect the men, women and children who have been converting their life's blood into golden eagles for the purpose of making American millionaires.

Then, again, our jails and penitentiaries have often been built with a fine disregard for the health of those who are so unfortunate as to be incarcerated therein. So notoriously true

has this been in penitentiaries in general that one-third of the deaths from those institutions have been ascribed to tuberculosis.

It surely was not intended by the State that persons sentenced to a term in the penitentiary or jail should, in addition to the deprivation of his liberty for a specified time, be also inoculated with so fatal a malady; and that state, whose failure or neglect makes it possible that her unfortunates are subject to infection, is guilty of a great crime against humanity.

The legal rights of the people, so far as public health is concerned, might be stated in the single word "protection." The first step in this scheme of protection in tuberculosis control is the right to know through our form of government, exactly the places, or sources of infection, for without this knowledge any effort for tuberculosis control will be entirely in the dark, and will accomplish but little. The Legislature of 1909, recognizing this principle, passed a law requiring that every physician, or hospital, or institution, be required to report every case of tuberculosis within twenty-four hours after having made a diagnosis, or having knowledge of the disease, to the local health officer. The Legislature required that these reports be confidential, be not open to the inspection of the public, or be published in the press, but be entirely for the information of the local Board of Health, and State Board of Health, to the end that certain measures of prevention might be inaugurated for the protection of the family and immediate community, as well as for that of the individual.

Numerous State Supreme Courts have held that this duty may be lawfully imposed upon physicians or attendants, without compensation, but the Legislature has provided that when these cases are reported and the procedure required under the law is carried out, that the local Health Officer should issue his order for \$1.00 in payment of the same. There can, therefore, be no excuse offered that refusals to make reports are based upon the claim of "no compensation, no service."

It should be understood by the physician, on the one hand, that it is not presumed or intended that the Local or State Board of Health should interfere in any of the rights or prerogatives of the attending physician in these cases; and by the tuberculosis patient, on the other hand, that the report of their particular case is not for the purpose of exploitation in statistical tables, but rather that the means and power of the State may be placed at their disposal for the purpose of assisting them in the protection of their family and friends, and to do what may be done under

the law to assist in their recovery and restoration to health and useful citizenship. Both physician and patient alike should be assured that these reports are confidential and that this confidence will be held inviolate, with all the force and power of the state to keep it so.

The people have a right to know when, where, and by whom, their dead, and by whatever disease, are buried. In this way only can permanent record be made of deaths and their causes, and information be obtained in cases where disinfection is required. It should be borne in mind that tuberculosis is essentially a house disease, and both law and reason demand that all places and things should be thoroughly and effectively disinfected upon the termination of a case of consumption. This disinfection is to be done at public expense, and the law declares that an apartment may not be occupied until disinfection has been made. The people have a right to know when they change residences that the house or the apartments which they expect to occupy, are free from the germs of infectious diseases.

People visiting public places or buildings have the right to know and to feel secure and safe from the possibilities of infection, and thus the anti-spitting ordinance should be rigidly enforced and the desecraters of theaters, churches, schools, street cars and railway trains be made to know that spitting upon the floor is both vulgar and dangerous.

Then the people have a right to know that when they travel by night in Pullman cars, or are sleeping in hotels, the beds of which were occupied by other persons the night previous, that the bed should be clean, and that fresh clean sheets be provided each night for the guest. All blankets, whether wool or cotton, should be covered with washable material so completely that they will not touch the face, while the blankets and bedding should be disinfected at least as often as once a month.

People have a right to have public buildings and cars properly ventilated, and these places should never be allowed to be over-crowded. When it becomes known that the great majority of so-called colds and sore throats are due to infection, disseminated in crowded and unventilated public places, and are not due to so-called drafts or exposures to low temperatures, we may be able to overcome the ill-advised opposition of so many people to having the windows open when the weather is a little cool, for fear of "catching cold."

It is said that the members of the Peary Polar Expedition did not suffer from colds, or what people commonly call "Grippe",

during the entire period of their stay in the arctic circle, during which time they underwent exposure to such extremes of temperature as would seem to make life itself almost impossible. Yet these same men upon returning to civilization, were immediately seized with sneezing, running at the nose and eyes, with the characteristic cough of an acute attack of cold. They simply became infected with the germs which are responsible for the majority of so-called colds, because of infected and improperly ventilated houses.

It is a matter of common observation that those who live out of doors, both winter and summer, and who properly ventilate their houses, even in cold weather, suffer but comparatively little from colds, and not any more during the winter time than they do during the summer time. The past year several tuberculosis sanitoriums have posted over their entrance gates the following very suggestive warning, "No person suffering from colds allowed to enter." We are now fully alive to the importance of saving tuberculosis patients from the serious handicap of cold infection, and sanitarians well know that with the out-door life, and free ventilation, which is practiced in all tuberculosis sanatoria, that colds due simply to exposure to air, never occur. The out-door, or fresh air treatment, of tuberculosis is now curing thousands of incipient cases annually. Surely, then, fresh air in our homes and in our public buildings cannot effect us with colds, pneumonia and other horrible things that hitherto have been laid at the door of the fetish known as "drafts."

It is to be remembered, however, that because air is cold that it is not necessarily pure. Some of the vilest air is found shut up in those places known as the spare bed-rooms, and in our modern churches, school-houses, hotels and cars. The janitors in the public places usually keep every opening closed in order to get the temperature up, and it is undoubtedly true that many school-houses and churches are never thoroughly and decently ventilated from November until May. The amount of fresh air required per capita, per hour, is said to be 1800 cubic feet. This amount cannot be secured through the chinks of the closed window, or the key-hole of the door.

High pressure and long hours in badly ventilated rooms are as bad economy in schools as in factories, stores and shops. In neither can health be maintained, or high efficiency expected.

Then, again, the people have a right to demand pure water, which is no less important as a prophylactic than pure food. It is not generally known that the tuberculosis bacillus may be found

in water containing sewage. This fact has recently been demonstrated by the Public Health and Marine Hospital Service and the Pennsylvania Laboratories of the Department of Health. Hence, no tuberculosis matter should be permitted to enter streams in sewage without thorough disinfection.

All sufferers from tuberculosis owe it to their fellow citizens to carry sputum cups, and on no account deposit sputum elsewhere, and this should be a matter of legal requirement. It is to the glory of Kansas that they have abolished the common drinking cup from the railroad trains and the public schools, thus one of the very fruitful sources of the dissemination of infectious diseases, including that of tuberculosis, has been abolished. Already public sentiment has been so molded in this splendid commonwealth, that it is considered almost a disgrace to drink from a public drinking cup.

If society was differently organized, or if each individual or family lived isolated from his fellows, or alone, there would be no necessity for Public Health Regulations, and the rights of the individual would be paramount. But such are not the conditions that obtain in our complex life, and thus we all as a community are interested in the health and the sanitary conditions surrounding every place of business, or every habitation, and are also concerned in the personal cleanliness of those who supply us with our foods, or who administer to our comforts in public places.

The waiter at the hotel may be nursing a brother with typhoid fever, the waitress at the noon lunch counter may be a diphtheria carrier, the chambermaid may have tuberculosis, the pullman porter, syphilis. The milk may be infected with scarlet fever, and the school-mate may have almost anything. Thus, by a thousand pathways, may dangerous infection be carried from one person to another. True the chances of infection are ordinarily small, and if the natural resistance is unimpaired, the infection may be counter-acted. But, multiply the chances one individual takes in a day by the number of individuals taking them, and the result is the annual morbidity and mortality tables concerning the infectious diseases. It is at the point where the individual and his family leave the domain which they may control, that public hygiene steps in, or should step in, and have such authority as may safe-guard the public health.

The fifteen hundred deaths from tuberculosis in Kansas annually will continue to be the penalty which outraged nature exacts from the people of the commonwealth, until the principles herein laid down shall have been faithfully and systematically carried out.

**REPORT OF CASE OF DESMOID OF THE STOMACH WALL AND
OTHER RECENT PATHOLOGICAL SPECIMENS.**

DRS. GEORGE M. GRAY, and C. C. NESSELRODE, of Kansas
City, Kansas.

Paper read before the Kansas Medical Society, May 4, 1911.

We wish at this time to report to the Society a few of the cases that have come under our observation recently. Our reason for wishing to so do is because of their extreme interest to us on account of their rarity. We are not only reporting the case histories, with a few remarks as to their pathology, but have here the specimens which we would be glad to pass around for inspection; also, slides for microscopic examination. These specimens have been mounted as you see them by the Pathological Department of the School of Medicine of the University of Kansas.

There are two bone sarcomas involving the tissues immediately surrounding the knee; two tumors of the stomach wall, one a sarcoma, the other desmoid; one specimen of torsion of the omentum occurring in the free peritoneal cavity with no omental adhesions to explain its occurrence; the other, a case of sporotrichosis, with here some photographs of the lesions, and here some cultures of the organisms.

Case 1.—Medullary Sarcoma, Head of Tibia.

Rev. M., admitted to St. Margaret's Hospital, September 2, 1907; family history negative, father dying at age of 67, cause unknown, mother, 53, of dropsy.

Personal History.—Negative, except a history of three hemorrhages which came probably from the lungs seven years ago; had always been strong and robust, without cough; hemorrhages occurred suddenly as he alighted from a wagon upon his return from a picnic, where he had played base ball; next day, a second hemorrhage, and a week later a third, but no cough or night sweats; weight, 180 pounds before hemorrhages; present weight, about 170.

Present History.—Present trouble first noticed in January, 1907, as an occasional slight pain in right knee on going down stairs. This continued until March, 1907, when the pain became more troublesome, with a slight degree of swelling, but not tender on pressure; this gradually grew worse, with increase of pain, until about the last of May, when he could scarcely walk on it. Now it was somewhat swollen and tender to pressure; all of the trouble seemed to be below the knee, as if in head or beneath the

cartilage of tibia. It had been regarded as rheumatism, but now the diagnosis was probable tuberculosis of the head of the tibia. The trouble gradually progressed and patient came to the hospital July 1, where a diagnosis was made of the head of the tibia and leg put in plaster cast, and the cast changed on the 29th of July, which remained on six weeks without improvement. During the time the cast was on, the pain was so great that a window was cut over head of tibia to remove pressure from tender area. Patient had been allowed to return to his home in Western Kansas, and returned to the hospital on September 2, when cast was removed.

Physical examination at this time revealed heart normal, slight dullness over apex of right lung; a small area of dullness beneath inner third of left clavicle; very slight impairment of respiration; right lung tubular breathing and increased vocal fremitus over small area in left lung. Abdomen negative; right knee slightly swollen on inner surface of inner tuberosity over an area of about two inches in circumference, in the center of which is a patch as large as a dollar. This has a boggy feeling. The area of tenderness referred to is on inner surface of head of tibia, and although being of a soft character does not pulsate. Urine negative. Blood examination hæmaglobin eighty per cent; white cells, 6000; red cells, 4,500,000.

September 6, 1907, examination of knee showed no effusion within the joint; slight swelling over surface of internal tuberosity; no redness; slight tenderness on pressure; marked increase of abduction of leg upon thigh, with prominence of tuberosity fibula.

Most comfortable position is when leg is flexed on the thigh. No limitation of motion.

Patient was anesethized, incision made downward from inner condyle of femur over most prominent part of inner tuberosity of tibia. Object of incision was to establish if possible, a correct diagnosis, as it was yet in doubt whether it was tubercular or possibly medullary sarcoma.

Upon incision, the knife entered the tumor mass, penetrating the periosteum and what remained of the compact bony tissue encasing the growth. The bone at this point being almost entirely destroyed; only little spicula remained sticking to a somewhat thickened periosteum.

Inspection of the tumor revealed without doubt that we were dealing with a medullary sarcoma of the head of the tibia. Amputation was done in the middle third of the thigh; our pa-

tient making an uninterrupted recovery thereafter, but died about one year later of pulmonary tuberculosis.

Case 2.—Condro-Sarcoma Femur.

Myrtle F., school girl, aged 14 years; had usual diseases of childhood; past history otherwise negative.

Present History.—Patient had been perfectly well until about fourteen weeks ago, when she in jumping from a buggy lighting on her right knee twisted it inward. She got on her feet, however, and was able to walk fairly well on the limb, but felt some pain; but gave it little consideration for the reason that it soon disappeared.

About nine weeks ago, or five weeks from the time of jumping from the buggy, patient commenced to notice slight pain and some soreness, and a little swelling on the anterior part of the right knee. The soreness remained and the pain, although not of a very severe character, was persistent; the swelling continued to increase daily, with a marked degree of soreness to the touch. On pressure it was hard in consistency. A light red color with dilated superficial veins and felt hot to the hand. The degree of pain and soreness is hard to determine, as patient was very nervous and much afraid. The swelling is well marked and uniform for about three inches above the knee and the skin edematous below the knee. Most comfortable position with knee semi-flexed on thigh. Urinary examination normal, except rather high colored; blood examination leukocytes, 8,000; polynuclear cells, 70%. No red count was made or hæmoglobin estimate made, though undoubtedly it was below normal from her general anemic appearance.

Diagnosis.—Sarcoma springing from the periosteum of the femur was made after an X-Ray plate was made, and amputation at the hip joint advised which was consented to and was done on April 1, 1911.

In these two types of bone sarcomas, there are many interesting comparisons: First, as to malignancy; the one only slightly malignant, the other extremely so; second, as to their origin. The first springing from the marrow and by its growth having swelled out the shell of overlying hard bone, with comparatively little actual destruction of tissue; the other from the periosteum, growing in all directions, destroying all kinds of tissues, having almost destroyed the shaft of the femur; third, both are very vascular; fourth, histologically. The first we have a soft, pulpy tumor, very vascular and very rich in cells, the cells varying in size and varying greatly as to the number of nuclei; some hav-

ing only one, while others have as many as twenty. In the nucleus is where the most marked difference from the second occurs. Here the nucleus is more adult in type, there being comparatively few mitotic figures. In the second is a mixed cell tumor, but most prominent perhaps is the embryonic cartilage cells. The reversion of type in many places is practically complete. The nuclei are large and show many, many active mitotic figures, practically no adult tissue, the vessel wall being made entirely of tumor cells.

We have here our microscope, together with sections of these tumors, if anyone cares to examine them.

Case 3.—Miss S. A., aged 37, single, teacher, admitted to hospital April 23, 1911.

Early history negative.

Past History.—Operated upon for gall stones four years ago, with removal of stones and drainage of gall bladder. Following this operation enjoyed good health until three months ago, when she began to complain of "stomach trouble."

Had almost constant pain of varying severity in epigastrium since beginning, three months ago; loss of appetite, with considerable belching of gas; lately has vomited a few times; no blood noticed; has lost twenty pounds in weight; is constipated.

Physical Examination.—Heart and lungs negative; no tumor felt in upper abdomen; some tenderness and slight rigidity in epigastrium.

Blood.—Hæmoglobin 70%; reds 4,000,000; whites 7,000.

Operated upon April 27; incision median line upper abdomen, Stomach exposed and tumor of lesser curvature located. Partial gastrectomy done.

Histologically, this is a small, round cell sarcoma, as will be seen by examining the microscopic slides here present.

Case 4.—Mrs. Mary B., aged 64 years; married, housewife, residence, Kansas City, Kansas.

Father's history negative; mother died with cancer of the uterus; brothers and sisters all living and in good health. Mother of two children, both living and in good health.

Past History.—Had usual diseases of childhood; otherwise general condition good; past the menopause sixteen years ago, or when 48 years old. When 49 years old, patient had slight vomiting spells accompanied by dizziness, which lasted about three months.

Present History.—For about one year prior to this date, patient had had attacks of discomfort in which she would lose her

appetite for food, and occasionally would vomit. These spells seemed to come about every month, so that she hardly recovered from one when she would have another, until about the first of July, when they became more distressing, and the loss of appetite more complete.

I first was called to see her in July, 1910, when I found her confined to her room and most of the time in bed, with some slight elevation of temperature and absolute disgust for food. She complained of epigastric discomfort and was tender over the epigastrium on pressure, but no tumor mass could be made out upon palpation.

Bowels constipated. Urinary examination showed urine somewhat low in specific gravity, with a few granular casts. Heart showed marked hemic murmur.

Examination of stool, which was made two or three times during July and August, always showed some blood.

Stomach examination, showed marked diminution in free acid, but no blood.

Her condition remained much the same, though somewhat improved after getting her out in the open air during the Fall; but she continued to have these relapses, always accompanied by a slight elevation of temperature, ranging from $99\frac{1}{2}$ to 100 in the evening.

From the middle of November until December 26, when she was admitted to St. Margaret's Hospital, she continued to fail gradually, losing weight and strength, and with absolute loss of appetite. Her hæmoglobin estimate when she entered the hospital was 60%, and fell to 50% during the time he remained in the hospital before operation.

Blood Examination. Red cel.s, 3,500,000: white cells, 9,400; repeated examination of stool showed mucous and blood.

Operation.—Exploratory laparotomy was advised and consented to; abdomen was opened in median line over epigastrium; gall bladder was somewhat distended, and adherent to omentum.

Examination of stomach revealed a tumor mass within the stomach, protruding into the duodenum which could be forced back into the stomach. The stomach was incised and the tumor delivered outside the stomach. It was attached by a small pedicle to the posterior wall of the stomach, about three inches from the pylorus. This tumor which I exhibit was then about the size of a duck's egg, covered only for about a half inch near the pedicle by the normal mucous membrane of the stomach. The balance of the tumor being somewhat spongy and the surface of a granular appearance, bleeding easily.

Some authors are inclined to regard these as a variety of fascial sarcoma. Their clinical course and histological structure do not justify their classification with the sarcoma. They seldom recur, for they are locally malignant only, and their histological structure bears a closer resemblance to fibromas than to sarcomas, and the name desmoid is used to distinguish them from the ordinary fibroma.

The tumor tissue is composed of young, connective tissue cells, with a scanty intercellular substance. The walls of the new blood vessels in the tumor display an intimate relation with the tumor tissue. The endothelial cells lining them are large and the tumor tissue forms the greater part of the vessel walls. The tumor cells infiltrate the adjacent tissue, besides displacing it for its encapsulation is very imperfect.

For those who care to, the sections of this tumor are here and may be examined microscopically..

Case 5.—The evening of March 14, I was called to see Mr. Fred B. He gave the following history:

Age 38, married, foreman of Armour Packing Company.

Past history negative.

Present History.—He stated that on Sunday, March 12, he had had some indistinct pains in the right lower quadrant of abdomen; no disturbance of stomach or appetite; bowels moved regularly. On Monday he went as usual to his work, but had some pain all day; ate a good supper, and slept fairly well. Tuesday, went to work, but had considerable pain and marked tenderness over a small area near McBurney's point; this pain and tenderness much more marked when standing; consequently, he lay down a good deal during the day; was seen by Dr. J., who made a probable diagnosis of appendicitis and sent him home about 4 o'clock. I saw him that evening. He had not vomited, had no temperature, pulse of 76; was complaining only of pain and tenderness in region of McBurney's point. Examination revealed a palpable mass in same region, not well outlined. Percussion note over this area dull.

Next morning temperature $99\frac{1}{4}$, pulse 84, leucocytes 16,000; 80% polys. Was sent at once to the hospital for an exploratory laparotomy on probable diagnosis of appendicitis.

Abdomen opened with escape of a dark greenish fluid. At once a dark gangrenous mass presented itself in the wound, of which on further examination proved to be the lower right quadrant of the omentum, twisted upon itself in such a manner as to produce strangulation of the distal part.

There were absolutely no adhesions to explain the twisting, and the patient had no hernia.

This mass was delivered out of the abdomen, ligated above the point of strangulation, as shown here in the specimen, then cut away and abdomen closed without drainage.

Temperature normal on second day and remained so.

The only similar case I am able to find reported is one reported by Comer and Pinches, of London, in 1905. Their case was like this, in that the patient had not a hernia, and neither were there omental adhesions.

In 1906, Pretsch, of Berlin, reviewed this subject and was able to gather together reports of fifty-four cases, 42 occurring in connection with hernia, 11 in the presence of omental adhesions without hernia, and only one, the case referred to above, occurring in the free peritoneal cavity. 74% of these cases were in men; 26% in women.

Case 6.—Miss Velma K., residence Zurich, Kansas. School girl aged 19 years; both parents living and in good health, being farmers; past history negative.

Was admitted to St. Margaret's Hospital, Mar. 15, 1911.

Past history negative; present history, about nine weeks ago patient noticed a small red pimple which itched slightly, situated on the back of the right thumb; free from pain or swelling. She bruised the red area after opening with a needle, but succeeded in getting nothing out of it.

The inflamed area which at first was only as large as a match-head soon became about four times the original size, and about twelve days later she noticed a similar patch to the initial lesion on the upper two-thirds of the forearm; but it seemed to be superficial to the veins, though directly along the course of the vein. After three or four days, there were about twenty-seven of these lesions on the forearm and arm. About six weeks after the first redness appeared on the thumb, a physician at her home opened two of the affected places and obtained some material supposed to be pus. The lesions opened were those upon the forearm. There was neither pain nor swelling attending this condition in the arm, and the soreness but slight. The trouble was first diagnosed as a phlebitis, before coming to the hospital, on March 15, 1911. About 20 of these lesions were incised under a general anesthetic and the contents saved for examination, from which cultures were made showing it to be sporotrichosis. These little lesions were hard and not larger than a navy bean, and some of them smaller.

Patient had no elevation of temperature or pulse disturbance; appetite remained good.

After nodules were incised, they were wiped out—first with pure formalin; afterward they were daily wiped out with tincture of iodine.

There was a tendency in all these nodules for the process to undermine the skin, extending out beneath the cuticle.

She was given iodide of potassium in daily increasing doses until she was receiving sixty grains a day, when the process seemed to be entirely under control. Infected areas healing.

TINCTURE IODINE AS AN ANTISEPTIC.

DR. N. C. SPEER, Osawatomie, Kansas.

Read before the Southeast Kansas Medical Society, Sept. 26, 1911.

Having been drawn, by observing current medical literature, to consider the usefulness of tincture of iodine, as an antiseptic, I have given it a trial and find it to be of considerable value.

In the treatment of recent wounds, I have found it more effective than my former system of rigid aseptic and antiseptic technic. To be most effective it must be used upon a dry wound, that is, one that has not been washed, for if the wound is water-soaked, it seems to become impervious to the action of iodine.

Technic differs slightly in the treatment of wounds according to their character, whether abrasions, lacerations, punctures, or large ragged wounds.

In abrasions, scratches, and scraped injuries, I use nothing but tincture of iodine and a covering of gauze. This treatment gives unusually good results and does away with the numerous redressings that I formerly found necessary.

Lacerations of any extent or depth, I swab to the bottom with the pure tincture, having previously cleaned them of any foreign matter with the finger or instrument, I then close with sutures if required, and cover with a protective dressing. I do not use drainage as a routine measure, as it is seldom indicated. This routine is very successful in the treatment of scalp wounds, which are so often difficult to heal without infection. They do so well that I seldom suture a short scalp wound.

Punctures are always considered treacherous injuries, especially when received in surroundings favorable to the development of tetanus.

In this class of wounds, I use the same treatment as for lacerations, and in addition, for safety's sake, establish drainage.

In any case where there is special reason to fear tetanus, I always use the serum. Large, ragged wounds, the kind that are filled with dirt and debris of all varieties, are the ones whose treatment has caused me to become so enthusiastic an advocate of the use of iodine. The wound is cleared of foreign matter with the finger and instrument, using no water at any time. Then the iodine is poured in, and by watching the progress of the discoloration it is easy to see how thoroughly the whole wound is permeated. I recommend this method, not only because I have found it most satisfactory in results, but because it saves a prodigious amount of time and work for the physician and shock and suffering to the patient.

A pound of iodine, a box of gauze, and a pocket case of instruments, would form a working equipment for the average emergency case.

In operative surgery and obstetrics also, iodine has a large field of usefulness. For an operation, the field is prepared in the usual manner preferably, twenty-four (24) hours before, protect in the meantime with the usual dressing. At the time of operation, the tincture is applied in full strength, permitted to dry, and the field is ready. If there is not time for so long an interval between the first cleansing and the use of the iodine, the procedure may be shortened by using the iodine as soon as the field is dry.

In preparing the hands for surgery and obstetrics, I use the tincture of iodine as a routine measure. The soap and water cleansing is followed by the iodine, after giving the hands as much time to dry as is convenient.

I consider iodine the best available prophylactic against infection, and also a valuable remedy for uterine inflammations. I formerly believed that the value of iodine in the treatment of endometritis lay in its astringent action, but now I have come to believe that it lies much more in its antiseptic properties.

In treating inflammations in general however, I have found iodine apparently of no great value, and after the infection has become established, I prefer the use of bichloride or carbolic acid. The bichloride I use in any case of infection where there is an ulcerating surface, and the solution can reach the source of infection, for instance, infected burns, abrasions and lacerations. The solution used is 1-1000 and the dressing is freely saturated. The use of bichloride would, of course, be contraindicated in cavities where mercurialism might be developed by absorption, or where the wound was very extensive.

I use carbolic acid in infected wound cavities, furuncles and carbuncles. My method of treatment is to introduce a cotton covered probe, saturated with carbolic acid, deep into each of the several cavities, then counteract the excess in a short time with alcohol. If not able to use a probe for a deviating sinus, I use a small piston syringe. I have treated four cases of carbuncles by this method, with most extraordinary results.

To return to the subject of iodine, I have found no contraindications to its use. It is true that it causes considerable discoloration of dressings and clothing, but it is readily effaced by ammonia, and it is easily removed from the hands and skin with a strong solution of bichloride. I have found fewer infections than with my former technic of soap, water, carbolic acid or bichloride. There is little pain in using it, no desquamation of the skin about the wound, nor a cauterizing of the cavities to prevent healing.

As to the thoroughness of the test I have given the use of iodine, I will state that my experience with it covers about two years of daily use, where I treat patients employed in industrial occupations, covering conservatively several hundred cases.

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THE NECESSITY FOR EARLY RECOGNITION OF GALL BLADDER DISEASE AND ITS SURGICAL TREATMENT.

DR. H. L. SNYDER, Winfield, Kansas.

Read before the Sumner County Medical Society, Nov. 9, 1911.

The term "gall bladder disease" is intended to be used in its widest sense for the reason that the object of this paper is to bring out the necessity for its early recognition. It would be well if, in the treatment of gall bladder disease, our text books would say, as they do in appendicitis, that it is a surgical disease always, and that it should be treated along those lines. This would not mean that the diagnosis of gall bladder disease would necessitate an operation at once. Neither does the diagnosis of appendicitis always mean an immediate operation. However, it does mean that gall bladder disease should be considered a surgical affection, and its surgical treatment should be given, when possible, at the time of election and not of necessity. It has taken approximately thirty years for the profession to become united upon a sane treatment for appendicitis. The laity are educated in like proportion to the profession, by the profession, hence today there is practically no opposition among the laity to the surgical treatment of appendicitis.

On the other hand, because of the ability of the gall bladder to withstand infection and traumatism, due to its scanty lymphatic circulation, the proper treatment of this field has been neglected by the profession at large. The laity are uneducated in reference to the diseases of the gall bladder and as a consequence the majority of the surgery of this region is done because of a crisis in the progress of the disease which makes such treatment immediately necessary.

The history of these cases is usually of more benefit in making a diagnosis than anything else. In this you may get a history of chronic dyspepsia with some tenderness over the upper abdomen, often times repeated attacks of colic, more or less severe, either with or without jaundice and the vomiting of bile. Jaundice, in itself, is best considered always obstructive, although catarrhal jaundice and hematogenous jaundice are not necessarily so. Their history and course do not suggest anything of a surgical nature, hence they are easily eliminated. The obstruction causing jaundice may be either inflammatory, due to infection or to traumatism; or it may be due to foreign bodies either within or without the bile passages; or it may be due to pressure of surrounding organs. Among the foreign bodies may be considered calculi, new growths and intestinal parasites. Pressure from without may be due to enlarged lymphatic glands, adhesions and inflammatory exudates such as frequently arise from peptic ulcer. Gall stones within the gall bladder, unless they attempt to pass or have an infection superadded, never give rise to jaundice. Stones within the common duct, at some time in their history, usually give rise to jaundice, although in a certain per cent of these cases it does not occur. The development of a tumor, usually painless, attended with jaundice points to malignant disease. Inquiry often elicits a history of gall stone disease preceeding it. Hand in hand with the development of a tumor emaciation progresses. New growths within the duct produce a progressive jaundice which is painless and you can not outline a tumor. Chronic pancreatitis producing jaundice is attended by some loss of weight, which is not so marked as in malignant diseases, but both are preceded by a history of gall stones. The jaundice of hypertrophic cirrhosis is painless and the liver is markedly enlarged. The jaundice of atrophic cirrhosis is preceeded by an alcoholic history, and attended with an enlargement of the spleen. Jaundice also attends the rupture of the gall bladder or the bile ducts. Jaundice about the umbilicus suggests free bile in the peritoneal cavity. This is always preceded by history of severe traumatism or a

marked inflammatory reaction. This brief consideration of the various causes of jaundice indicates the necessity for careful history taking.

The age of the patient, the sex and constipation are all of value in forming an opinion. Gall stones are three times more frequent in women than in men. Naunyn claims that 90% of women who have gall stones have borne children. Approximately all cases of gall stones develop after forty years of age, although they have been found in young children. By this we see that no age is exempt. There has been described three principal causes of gall stones; first, the action of micro-organisms which cause a deposit of cholestrin and the lime salts, a majority of the cases giving a history of having had typhoid fever; second, obstruction of the free drainage, which is usually due to infection; third, a so-called gall stone diathesis.

The symptoms given by gall stones depend entirely upon their location, whether accompanied by infection, and whether obstruction is produced. Where gall stones are confined in the gall bladder a history of intermittent attacks of colic is given, the pain of which is felt in the midline radiating to the back and is frequently diagnosed as gastralgia. There is no jaundice and the pain is due to a sudden temporary obstruction at the neck of the gall bladder, the pulse rate is not quickened and the temperature is not elevated. The attacks are intermittent and often disappear for years. The surgical relief of this condition is safe and positive, the mortality is not greater than one in three hundred and 95% are permanently cured. Among the complications of gall stone disease are; stones impacted in the pelvis of the gall bladder and in the cystic duct, which give rise to pain beginning as in the simple variety. Instead of ending in a few hours, the attack continues, marked tenderness and rigidity of the abdomen over the gall bladder develops, the gall bladder becomes greatly distended with a mucoid fluid, which frequently becomes infected, the temperature rises and the pulse is accelerated. The only reason the patient does not die, as he would from the same degree of infection lower down in the abdomen, is due to the scanty lymphatic supply. After a number of days or weeks the contents of the gall bladder are absorbed and the symptoms gradually disappear. This course is the usual one where the stones are impacted in the pelvis of the gall bladder. At times the stone is forced down through on the cystic and common ducts and out, but other times there may be adhesions formed between the duodenum, colon or stomach and a fistula may form thus emptying

the gall bladder into the bowel. Rarely perforation into the peritoneal cavity occurs, giving rise to peritonitis. In other cases we may have a localized abscess formed which may gravitate downward and discharge into a hollow viscera; or it may go upward forming a subdiaphragmatic abscess, which may rupture into the pleura or into the lung and be discharged that way. Stones in the cystic duct do not usually give complete obstruction. They are usually accompanied by a contracted infected gall bladder, which intermittantly discharges its contents, giving rise to chills, high fever, and sweating, attended by the symptoms of severe inflammatory reaction. In some instances where there is not infection of the gall bladder, a stone in the cystic duct gives rise to marked gastric symptoms, pain and vomiting, simulating peptic ulcer. If jaundice occurs in either of these conditions it is due to the swelling of the mucous membrane of the common duct incident to the infection and inflammation following it. Stones in the common duct give rise to much the same chain of symptoms as stones impacted in the pelvis of the gall bladder or the cystic duct with the addition of jaundice. They may remain there for years producing chronic dyspepsia and recurrent attacks of cholangitis with chills, fever and sweats. They at times pass on out into the intestines and are discharged and the symptoms quickly disappear. They usually leave a thickened inflamed common duct and are a common cause of pancreatitis. Hepatic duct stones give rise to the same symptoms as common duct stones.

We may have inflammation of the gall bladder without the presence of stones, of which three varieties are described: an acute phlegmonous form in which the gall bladder may undergo gangrene; a subacute form in which the gall bladder is greatly distended; and a chronic form in which the gall bladder is filled with a thick dark colored bile and is surrounded with a mass of adhesions.

As a point in urging the necessity for early recognition of diseases of this organ, we will briefly consider the complications that arise. The first are acute perforations, which if not treated by immediate surgical intervention are fatal; second, fistulous communications which may or may not close spontaneously and which not infrequently give rise to obstructions; third, adhesions, which, if they do not give rise to obstruction of either of the bile ducts or intestinal tracts, frequently cause chronic digestive disturbances; fourth, stricture of the duct as a result of stone is common; and fifth, fifty per cent of all acute infections of the pancreas

have their origin in infection from the bile ducts and seventy five per cent of chronic infections of the pancreas are preceded by the same history.

Cancer may be considered a result of the irritation of gall stones or the inflammatory lesions of the gall bladder. Those who have had the most experience in the treatment of gall bladder affections agree that in from eighty five to ninety five per cent of cases of cancer there are gall stones also. Some men of wide experience find them in every case. They likewise are agreed that in 75 per cent of all cases the female sex is affected, as in gall stones, and they are further agreed that the presence of cancer is best explained upon the irritation theory.

The misuse and abuse of the term "stomach trouble", by which the laity, and also the profession, designate the digestive disturbances, reflexly due to gall bladder disease, is deplorable. On the part of the profession this is due to no effort being made to obtain a history or to make a physical examination. While organic stomach disease does exist, yet the majority of the cases claiming to have stomach trouble, and being treated for such, have no disease of the stomach directly, but are suffering from reflex disturbances. The term liver trouble is equally as vague and like wise no indication of the true condition and ought never be given by any self respecting physician, for in this locality, unless occurring as a late change in some other process, that is gall bladder disease, syphilis, etc., organic disease of the liver is very rare, as is organic disease of the stomach.

Since the majority of all diseases of the gall bladder start as simple gall stone disease, which has a rather definite symptomatology; and since the obstruction of the cystic and common ducts with disease of the pancreas are a sequence of this condition; and since so large a percentage of the cases of cancer of the gall bladder are almost directly traceable to the irritation of gall stones; and since the same causes open up an avenue of the infection of the gall bladder, we should make an effort to diagnose gall stone disease in its incipency. An effort should then be made to see that these cases receive proper surgical treatment at the time of election when the danger of such procedure is minimized. It will mean the prevention of many infections and of many a case of cancer of the gall bladder, or at least their discovery at a time when such measures can be used for their relief.

COLPECTOMY.

L. F. BARNEY, M. D., Kansas City, Kansas.

Read before the Wyandotte County Medical Society, Nov. 7, 1911.

The word colpectomy is of Greek derivation and literally means "to cut out the vagina." It is an operation indicated in a few selected cases of vaginal prolapse and some cases of cancer.

Before taking up the operation we will briefly review some of the anatomy and the conditions which brings about its necessity.

The vagina is a canal varying in size, both in calibre and depth, lined with a mucous membrane, and surrounded by muscular striæ, that are designated as the sphincter vaginae. This tube thus constituted, extends from the vulva to the uterus, and is surrounded by more or less loose cellular cell tissue. It is held in place not alone by its attachments to its surrounding areolar tissue, but more particularly by its attachments to the uterus and pelvic diaphragm and by its support which it derives from the perineum and is liable in whole or in part, to displacement.

Upward displacement rarely occurs and is usually caused by a fibroid or other uterine growth pushing up above the pelvis and dragging the vagina with it. Downward displacement, prolapse of either a part or the whole of the vagina, is more frequent and may be caused by either weakness of the pelvic diaphragm or weakness of the pelvic floor, or both. Prolapse or descent of the uterus is usually found where there is a weakness of the pelvic diaphragm, and as the uterus falls it pulls down with it the vault of the vagina relaxing the floor of the anterior and posterior cul-de-sac. Frequently the prolapse of the uterus is so extensive as to relax the anterior vaginal wall and produce a cystocele.

Relaxation of the pelvic floor or the enlargement of the vaginal orifice by laceration may by removing the support of the structures induce a prolapse of the vaginal wall.

When the anterior vaginal wall prolapses it forms a pouch from the bladder and is known as a cystocele. When the posterior wall pushes forward and downward forming a pouch of the rectum, it is known as a rectocele. The symptoms of both of these conditions, are very characteristic and to a great extent the patient has made her own diagnosis before consulting the surgeon. She says it feels as though something is coming out. In cystocele she may have difficulty in emptying the bladder, and the protusion is increased by attempting to urinate, and frequently

where the cystocele is large, the patient will have to take her finger and elevate the bladder before she can empty it. She may not be able to completely empty it, and the irritation of the residual urine starts up a cystitis, with the usual accompanying symptoms. The diagnosis of cystocele may be made positive by passing a curved sound into the bladder, which when the point is turned posteriorly may be felt in the pouch through the vaginal wall.

In rectocele the woman upon straining to defecate will feel as though the bowels were going to move through the vagina. In this, too, the protruding mass is also increased upon straining. Here the diagnosis may be made positive by passing the finger into the rectum and feeling that it goes forward into the protruding pouch.

The treatment of these conditions are medicinal, mechanical and surgical. The medicinal treatment resolves itself into the use of astringents, antiseptics, emollients, laxatives, and tonics. With these the results are but temporary, for they do not restore the anatomical parts. The mechanical treatment consists in the use of supports of various kinds, viz., tampons, pessaries, of various sorts, and perineal bands and supports. These like the medicinal treatment give only temporary relief. Best among them probably is the tampon, but it has the disadvantage of requiring the too often and very frequent service of the physician, taking up too much time of the patient and when the treatment is discontinued the relief is also discontinued.

Pessaries frequently for a time render temporarily relief but as Reed says, "as a rule are more mischievous than otherwise," They by their construction have to depend upon dilating the vaginal wall or impinging forcibly upon some parts of the wall and thus doing further damage. If they depend upon dilating the wall, the tissues soon give way and become permanently relaxed thereby increasing the trouble, while on the other hand if they are retained by resting forcibly upon some of the more fixed portion, this constant pressure produces erosions and necrosis and opens up avenues of infection.

As to the surgical treatment, there are many different operations for the different conditions, and many different operations for the same condition. Each different operation has its own advantages and its own advocates. The operation for cystocele is called anterior colporrhaphy and consists in narrowing the anterior wall of the vagina by removing the redundant mucous membrane and bringing the edges together. The different opera-

tions for this vary only in the shape or the amount of the mucous membrane removed or in the way the edges are sutured together. Right here I might say that this operation when done alone without being combined with some of the other plastic operations, such as perineorrhaphy is rarely a permanent success, as it depends entirely for support upon the mucous membrane which is very pliable and elastic and soon stretches out and lets the bladder pouch return again.

The operation for rectocele is called posterior colporrhaphy and is similar to that for cystocele except that it is done on the posterior vaginal wall. This operation is usually done in conjunction with a perineorrhaphy.

Perineorrhaphy is the name given to the operation for repair of a lacerated or relaxed perineum. It, briefly speaking, consists of loosening up the mucous membrane and scar tissue over the perineal body, trimming it away and bringing the divided and relaxed muscles together and also the edges of the mucous membrane.

For prolapsus uteri, many operations have been devised, and many combinations of operations have been used. Among these are ventral fixation, shortening of the ligaments, principally the round, anterior and posterior colporrhaphy, perineorrhaphy, amputation of the cervix, etc., etc. While these operations as a rule are quite successful, yet there are a number of cases in which there are relapses and for these aggravated cases the late George M. Edebohls, devised an operation which he termed "Panhysterocolpectomy," which briefly stated consists of doing a vaginal hysterectomy, and along with it denuding the entire vagina of its mucous membrane, and bringing the raw surfaces together completely closing and obliterating the vagina.

According to Gallant of New York, in a paper read January 28, 1911, before the Section of Obstetrics and Gynecology of the New York Academy of Medicine, fourteen of these operations have been done, Edebohls 8, Waldo 3, Boldt 2, and Gallant 1. He says all of these were remarkable for the absence of shock and the rapid and smooth convalescence. This operation I have never seen, but recently I had occasion to do what practically amounted to a colpectomy for a complete prolapse or eversion of the vagina, which followed a vaginal hysterectomy performed some five years prior. This operation I will describe by reporting the case—In November, 1910, Mrs. B., of Western Kansas, came to me on account of being reduced to a state of almost complete invalidism on account of as she stated "everything falling out."

She gave the following history; married, a farmer's wife, age 69 years, German, the mother of 9 children, had always been strong until the last few years. In the summer of 1895 a vaginal hysterectomy for a suspected cancer of the cervix was performed upon her by one of the prominent Kansas City Surgeons. The immediate recovery was uneventful and she left the hospital after about two weeks. She remained in the city for a short time, and one day when making a trip to the surgeon's office, she complained of a sensation of something giving away. Little attention at the time was given to it but the condition gradually became worse and worse until a soft bulging mass protruded from the vulva. The annoyance became more and more, until she was compelled to take her finger and lift up this part, pressing it back into the vagina before she could urinate. She consulted her local physician concerning this and he, as she described it, gave her a glass ball to insert into the vagina. This for a time gave some relief but in a very short period the condition was worse than ever and the pessary would not stay in. She again consulted the local physician and says that he took the case up with the surgeon who performed the hysterectomy and, that he, the surgeon, said there was nothing more to be done for her. When I first examined her there was a soft, smooth, reddish mass about the size of a grape fruit protruding from the vulva. Indeed it appeared very much as a half of one of these soft red rubber balls, that babies play with. This, upon placing the patient in the dorsal position was easily replaced in the vagina showing that it was a complete eversion of the vagina. With the exception of a care worn worried look her appearance was healthy; heart and lungs normal.

After having the case under consideration for a few days, I decided her condition could be improved by excising the vagina. At this time I had never seen or heard of this being done for prolapse. Upon informing the patient of my conclusion, she readily consented to have the operation tried, stating that she did not think that her condition could be much worse, and that in that condition life was not worth living. She was sent to St. Margaret's Hospital, and on November 14, 1910, the operation was performed. The ordinary preparations was made, and the patient anesthetized. With the knife, a field extending from just behind the meatus to the scar where the uterus had been removed and laterally almost midway on the lateral wall was marked off. With knife, scissors and gauze, the mucous membrane within the above outline was peeled off and the edges brought together from side to side with interrupted No. 1 formalized pyoktannin

cat-gut, sutures placed about $\frac{3}{8}$ inch apart. The first stitches were placed at the inner or upper end of the field, As each one was placed, it lifted up the wall and drew the vagina back into its normal position. The posterior wall was then marked off with the knife in the same manner as the anterior wall. This began by cutting through the muco-cutaneous junction at the fourchette and extending the incision along nearly to the cut edge anteriorly and the mucous membrane was peeled and cut out leaving a narrow strip on each lateral wall. The posterior edges of the mucous membrane along the recto-vaginal septum were sutured with interrupted sutures as was the anterior, then deep interrupted sutures were placed in the levator-ani muscles bringing them in apposition and the skin closed by sub-cutaneous sutures of plain No. 1 cat-gut. When this had been done the vagina was completely closed with the exception of a small canal about the size of the urethra. Fearing there might be some oozing of blood, a small strip of gauze was packed into this. The patient was put to bed and made an uneventful recovery. The operation had consumed considerable time but in spite of this and her advanced age, was not followed by any perceptible shock. The first few days the patient was catheterized and later allowed to use a commode. She was kept in bed for two weeks and left the hospital before the end of the third week. I had withheld reporting this case as I had been waiting to know the final results. August 10, this year, ten months after the operation I received a letter from her stating that she was perfectly well and feeling better than she had for twenty-five years. This seems to me to be sufficient time to conclude that the results have been permanent and satisfactory. Gallant reports in his paper doing a colectomy in April 1909 for cystocele following a hysterectomy done twelve years prior. Practically the only difference in the two operations was that he removed all the vaginal mucous membrane while I left a small tube. For indications for colectomy, I quote him, "In a woman suffering from cystocele with or without prolapse of the uterus or rectum, either before or after hysterectomy, especially when other operations have failed to secure a permanent cure, provided she has passed the child bearing period or is otherwise debarred from child bearing, who has reached the menopause, whose husband is willing to forego marital relations and one who is usually "frigid", the complete excision of the vaginal mucous membrane, with the uterus if present, and columnization of the vaginal tube is a safe and sane operation, which will secure an absolute and permanent cure of the prolapsus, at a minimum

of danger and loss of time, with a maximum of security against recurrence, Practically the only contra-indications are the questions of child bearing and in married women, at least, the loss of sexual relations."

The Occult Blood Test.—A possible error in the test for occult blood is pointed out by W. Newbold (Journal A. M. A., November 4). That certain substances might cause an error, such as the ingestion of bloody meat, the use of certain starchy foods and the use of iron as a medicine, is well known, but no one, so far as he knows, has pointed out the cause for error which he here describes. During the examination of a patient suspected of having a duodenal ulcer he made the statement that he was passing blood by the bowels. There was no evidence of local bowel irritation and little in the history to indicate any cause for blood. Superficially, however, it would appear that there was blood in the stools, but no blood-cells could be detected. A careful microscopic examination of the feces revealed the presence of minute portions of a material that looked like blood but proved to be watermelon pulp. Experiments proved that the coloring matter of watermelon pulp would give the characteristic chemical tests for blood, and the expressed juice of the melon also gave similar color reaction but less intense. As Newbold says, watermelon is so common an article of food during the heated season this possible source of error should be considered.

Early Diagnosis of Measles.—E. Apert describes two signs that he considers pathognomonic of measles, and that appear so early in the disease, or so late in the incubation period, that isolation begun at this time will prevent its spread to others in the family. It is not early enough to make the diagnosis when the catarrhal symptoms have appeared. The disease is then infectious and all precautions fail to prevent its spread. The signs that are of value are Koplik's spots and conjunctivitis of the pterygeal area, that is of the conjunctiva between the lids. This appears when Koplik's spots are seen, that is three or four days before the skin eruption, and both signs have disappeared when Koplik's spots are seen—that is, three or four on the inner surface of the cheeks, rarely on the inner side of the lips, never on the gums or palate. At first they are like tiny, grayish granulations on the rosy mucous membrane, later becoming bluish.—Le Bulletin Medical.

THE JOURNAL OF THE Kansas Medical Society.

JAMES W. MAY, - - - - **EDITOR.**

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EDITORIAL

Credulity is usually born of ignorance.

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None can gainsay the value of good honest criticism.

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The way to gain a good reputation is to endeavor to be what you desire to appear.—Socrates.

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Make simplicity the keynote of your life and you will be great, no matter though your life be humble and your influence seem but little. Simple habits, simple manners, simple needs, simple words, simple faiths,—all are the pure manifestations of a mind and heart of simplicity.—Jordan.

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GREETINGS.

A Merry Christmas and Happy New Year to all. May the God of Joys, Happiness, Peace and Contentment endow you with all his blessings.

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With the dawn of the New Year we should resolve to do all in our power for humanity to every possible degree. We should strive to better ourselves mentally and physically so that our efforts to subdue disease will be more powerful and consequent-

ly more successful. We should condone the faults of our enemies and smile at our own misfortunes. We should withal be gentle kind and charitable, thus lightening the burden of life, in all of its walks. Such living is real living.

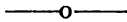
Teach the children, to-day, what we, yesterday, did not know about the causes and prevention of disease, that, tomorrow, the people of Kentucky may live longer, freer from sickness and be able to carry on the warfare against disease with less opposition from ignorant people who must be protected in spite of themselves.—Bulletin Kentucky Board of Health.

Nothing could be more in the line of duty of the present day physician than that stated in the quotation above. Preventative medicine is rapidly assuming a plane where it rightly belongs and any measures calculated to prevent disease is vastly of more importance than the discovery of means to cure them. The prevention of disease of children by teaching them how to live is of the greatest importance and we are derelict in our duty if we fail to use our best efforts to preserve the younger generation to a healthy manhood and womanhood.

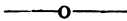
At the last meeting of our Society there was some criticism offered the Committee on Necrology for having seemingly done nothing the past year toward perpetuating the memories of the diseased members of the State Society. The Committee is to blame at least the editor of the Journal, who is a member of the Committee will take his share, but when it is known that during the past three years there has not been forwarded to the Journal to exceed six notices of deaths occurring among the physicians of the State, then the editor is willing to shift a part of the responsibility upon the secretaries of the county societies. They should notify the Journal so that proper notice may be made in its columns and the committee given an opportunity to adopt suitable resolutions and prepare an obituary for preservation.

From the number of communications, articles, et cetera., concerning pure food and drugs, but in reality attacks on Dr. Wiley, received by the editor almost daily, it would seem that the "interests" (i. e., the food and drug adulterators), do not lack for funds to prosecute their work. It must take quite a number of employees to "favor" all the editors and publishers of newspapers, magazines and medical Journals with this kind of pabulum which

is *gratis* (no bills having been rendered). It also must require some expense account for gathering "data" to show wherein Dr. Wiley has pulled the wool over our eyes and that the real saints are some of the other members of the department who were grilled most beautifully during the "Wiley Investigation" conducted by Congress, and were made to admit that they had tried to forestall in nearly if not all ways possible the enforcement of the pure food and drugs law. It would seem to the causal observer that the amount of money spent in this and various other ways, that some people were vitally interested in seeing Dr. Wiley relieved from duty their object being very plain indeed. From the present out-look there does not seem to be any immediate danger of Dr. Wiley being relieved from duty, but stranger things have happened and in the light of the financial backing which his oponents seem to have, the plot may mean more than we would care to see happen. It would be sad indeed to see the work in this department which Dr. Wiley has so ably championed be curtailed in any degree.



The Council of the Kansas Medical Society will hold their annual meeting at Topeka, January 12, 1912. As matters of importance to the society will come up the secretary desires a full attendance of the councillors.



EDITORIAL CLIPPINGS.

Can Hair Turn White in a Night?—A cherished popular belief is that of the sudden blanching of the hair from fright, worry or other severre mental strain. It plays its part in the drama and in fiction, while history records its famous instances. Who has not heard that Marie Antoinette's hair turned white during the night before her execution, or that the deeds and terrors of St. Bartholomew's night blanched the hair of Henry the Fourth? Most of us have wondered how the change could come about so rapidly as tradition relates; and yet so universal is the belief in this phenomenon that few have the hardihood to doubt it. One may accept one theory, that a sudden entrance of air or gas into the hairs makes them gray or white, or one may accept Metchnikoff's idea that it is all done by hungry, pigment-loving phagocytes, or one may take the stand of Stieda and boldly say that it isn't so at all. This refractory German first proves that such a thing couldn't possibly happen, and then, not satisfied,

declares that it never did happen. With equal disregard of folklore, history and medical literature, he points the finger of doubt, and challenges many long-deceased historians and physicians to arise and prove their stories.

In an extensive article he shows that when the hair turns white under ordinary conditions it does so in one of two ways. Either the pigmented hairs fall out and are replaced by unpigmented hairs, or, less commonly, pigment production stops in a growing hair and the colorless portion gradually replaces the darker outer segment. In neither case there is a bleaching or removal of existing pigment from the hair, leaving it colorless. Metchnikoff's theory of removal of pigment by phagocytes, and the older hypothesis of bleaching of the hair by formation of gas bubbles, are both, Stieda believes, entirely incorrect.

As this work supports the theory that hair becomes white only by replacement, and as the growing of a new crop of hair in a single night is beyond the possibilities of even the Seven Sutherland Sisters, the author must needs discredit all tales of such miraculous transformation. This he does *in extenso*, taking up the best known instances of such supposed blanching of hair, and finding them all lacking in support sufficient to meet critical consideration, much less such control as to establish an acceptable scientific demonstration. For example, he finds that Charcot doubted the story of Marie Antoinette's sudden loss of hair pigment, stating that although the queen certainly was gray at the time of her execution, yet this was no novelty, for she was also gray nine months before, at the time the king met his sudden end at the hands of the revolutionists.

As for the rest of the reputed cases, many are nothing better than old-wives' tales, while others are examples of medical credulity substituted for healthy skepticism and careful investigation. The explanation for many is unkind, being simply that the keeper of the jail or dungeon in which the unhappy heroine or hero was confined neglected to furnish his guest's dressing-table with the hair-dye to which the latter had been accustomed at home, and that Nature asserted herself before release or execution. Verily the iconoclast respects nothing—not even the gray hairs of royalty.
—Journal American Medical Association.

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Ophthalmoscopy in Medicine.—Medicine is making great strides and every year finds new methods of diagnostic precision. It is becoming imperative and more necessary for the general practitioner to have a reasonable working knowledge of these

newer methods and to be conversant with the instruments. While he cannot hope to become expert in the use of those procedures used only in a limited number of cases he should perfect himself in utilizing appliances that will be found helpful daily.

It is now sixty years since Helmholtz invented the ophthalmoscope and what a small minority of medical men can examine the ocular fundus. Its use is practically confined to a few diagnosticians, neurologists and men specializing in ophthalmology. This positively spells of medievalism and is no credit to the profession. Think of it gentlemen, sixty years since a most useful and very inexpensive instrument has been perfected and but a minority of you make use of it.

Within the past decade the electric ophthalmoscope has been made practicable, so much so, that one can learn to see the fundus with little practice and carefully study the interior of the eyeball. Nowhere else in the system can one see blood coursing through the vessels, both arteries and veins, examine their coats and have under inspection a nerve trunk coming directly from the cranium, a piece of the brain, as it were, pushed under your eye.

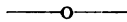
A five per cent. solution of euphthalmine instilled once or twice into the eye will cause a dilation of the pupil, furthering the ease of examination, without the fear of raising the tension and causing glaucoma.

Other mydriatics should not be used before the fundus has been examined as they raise tension and occasionally may be followed by an attack of acute glaucoma.

Numerous diseases of the central nervous system produce changes within the eye and often a beginning optic nerve atrophy is the first sign of incipient spinal sclerosis. The circulatory system also shows here with hyperæmias, anæmias, hemorrhages and changes within the walls of the vessels, etc. Diabetes and nephritis are often first suspected after using the ophthalmoscope.

Syphilis, either when inherited or acquired at times manifests itself here as does miliary tuberculosis.

To epitomize: The ophthalmoscope is now a handy, inexpensive, simple and useful instrument which should be used as a measure of routine examination in internal medicine and the general practitioner has not fully protected his patient if not utilizing this simple and useful aid in diagnosis.—W. S. F.—California State Medical Journal.



An intensely dramatic incident in life in the northern wilds of this continent has recently been reported. At Fort Hope, one

of the northernmost stations of the Hudson Bay Company, where the few residents of the white race are cut off from civilization the whole year round, Harry McPherson and his wife have been sustaining the rigors of climate and hazards of isolation in that wild region. The wife was taken ill and the husband with that rough and ready knowledge of a great variety of things which is forced on people who are left entirely to their own resources in such a situation diagnosed the stricken woman's ailment as appendicitis. McPherson had no more knowledge of surgery than comes to a man accustomed to giving "first-aid" to such injured Indians, half-breeds and whites as need attention by reason of the ordinary accidents occurring at a fur station. He knew, however, that instant action was necessary to save the beloved life. With splendid courage and nerved by a devotion which inspires the great majority of men in the martial relation, he made the incision and removed the vermiform appendix with no other instrument than the "first-aid" kit. This desperate remedy for a desperate disease appears to have been crowned with success, but the dreadful difficulties of the case were not yet over. Nepigon, the nearest settlement having a hospital, was 200 miles to the south. Transportation of the patient could only be made by canoe and portage. For this journey the woman was prepared and ten Indians were employed for the expedition. At one point the sufferer was carried by the Indians for 13 miles over difficult ground. Finally she was lodged in the hospital at Nepigon. Husband and wife manifested heroic bravery which must have evoked a thrill of admiration in every human breast. Think of the woman who submitted herself to that crude surgery in an operation which might have meant immediate death at the hands of her husband. There was no anesthetic, no other anodyne than loving confidence that the husband would do his best.—Journal Indiana State Medical Association.

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SOCIETY NOTES.

The Western Surgical and Gynecological Association will meet in Kansas City, Mo., Dec. 18-19.

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Sumner County Medical Society met in extra session Nov. 9, at Oxford, Kansas, as guests of Drs. Collins and Rea. Dr. J. T. Axtell, President State Medical Society was made chairman. After the program an excellent lunch was served by the wives of the Oxford physicians.

The Western-Kansas, Decatur-Norton County, Cheyenne-Rawlins and the Tri-County Medical Societies, held a joint session at Colby, Kansas, Nov. 15, 1911. The following program was given.

"Antitoxin in the Cure and Prevention of Diphtheria", Dr. Smith; Discussion, Dr. Stoner, Dr. Pope.

"Care of Mother in the Puerperium," Dr. Johnson; Discussion, Dr. Hardesty, Dr. McIrwin.

"Status of the Medical Profession in California," Dr. Carmichael.

"Ectopic Pregnancy," Report of three cases, Dr. Lathrop; Discussion, Dr. Eddy, Dr. Dillingham.

"Diagnosis and Treatment of Tuberculosis," Dr. E. J. Beckner; Discussion, Dr. Ward, Dr. Parker.

Report of Committees.

Election of Officers.

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RESOLUTIONS ADOPTED BY THE STAFFORD COUNTY MEDICAL SOCIETY.

1. Resolved, That we heartily endorse the action of *Colliers Weekly*, the *Ladies Home Journal*, and other publications which refuse to become parties to fraud and graft by accepting advertisements designed to separate their confiding patrons from their hard-earned money.

2. We deplore the fact that the two leading papers of our own great state—The *Topeka Daily Capital*, and The *Wichita Eagle*—lend themselves to the perpetration of such frauds for a part of the swag. As witness, the recent full-page advertisement in the *Topeka Daily Capital* of Mr. Carson, posing as a Divine healer, and Prof. (whatever that is), Samuel's running advertisement in the *Wichita Eagle*.

3. We especially condemn this partnership with graft and fraud in these two papers because the owner and editor of one is an avowed candidate for Governor of our beloved state, while the policy of the other is, doubtless, largely directed by Mr. Murdock, who, by his work in Congress, has rendered such signal service, not only to his home constituency, but to the people throughout the United States of America, as well.

4. We believe that the same high standard of business and political conscience should be demanded of those who aspire to direct the destinies of our state and represent us in the United States Congress as we demand of those we meet personally and socially.

5. We have read with interest and amusement the names of the committee to whom Mr. Capper submitted the matter of accepting Mr. Carson's advertisements. We have none but the kindest feelings for this honorable committee, and for the purpose of distributing, presents to children from a Christmas tree, this committee would be an ideal one. but for the purpose of detecting fraud and deceit, not one of them is possessed of a single qualification.

6. Therefore, We request that Mr. Capper submit this question to any scientific body of men, of whom, none is more worthy than the faculty of our own great University.

Respectfully submitted,

J. P. DYKES,
W. L. BORST, Committee.
CYRUS WESLEY.

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NEWS NOTES

Dr. D. E. Esterly of Topeka, spent November in Chicago, attending the clinics.

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Dr. S. S. Glasscock of Kansas City, Kansas, was recently unanimously elected President of the Academy of Medicine of Kansas City, Mo.

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Drs. S. G. Shelley and S. W. Spitler of Wellington attended the meeting of the Rock Island Surgeons in Chicago.

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Dr. J. L. Halliday of Wellington, has returned from a months post work in Montreal, Canada.

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Dr. Byron L. Hale has been appointed City Physician of Cherryvale, vice, Dr. B. M. Savage.

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Dr. R. A. Roberts of Kansas City, Kansas, is again able to resume work after an enforced idleness due to sickness.

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At a "tag-day" held recently in Kansas City, Kansas, Bethany Hospital was enriched one thousand dollars, which will apply on the expense of the new building now being erected.

Ultraviolet Rays to Purify Water.—Army surgeons in the Philippine Islands report that they have been making successful experiments with a plant consisting of a small dynamo and gasoline engine, carried in the ordinary escort wagon with troops, which has shown itself capable, by the generation of ultraviolet rays, of completely purifying foul water so as to serve daily a quart of sweet drinking water to every man in the regiment. The ultraviolet rays are said to destroy, not only the animal parasites in the water, but also the bacteria.—Journal A. M. A.

The second annual meeting of the Clinical Congress of Surgeons of North America, was held in Philadelphia, Nov. 7-16. The program was of exceptional interest given by widely known surgeons.

The following officers were elected: President, Dr. D. Edward Martin, Philadelphia; vice-president, Dr. George E. Brewer, New York City; general secretary, Dr. Franklin H. Martin, Chicago, (reelected), and general treasurer, Dr. Allen B. Kanavel, Chicago, (reelected).

OBITUARY,

Surgeon-General Walter Wyman, U. S. Public Health and Marine Hospital Service, died at Washington, D. C., November 23, aged 63. His skill and untiring energy has raised the efficiency of the department two-fold. His death is a great loss to the medical profession, the U. S. Public Health and Marine Hospital Service, and his many friends. His work will stand as a fitting monument to his greatness.

Everett M. Brockett, M. D., Kansas Medical College; Topeka, 1897; a member of the American Medical Association and once president of the Shawnee County (Kan). Medical Society; instructor in chemistry in his alma mater; died suddenly at his home in Topeka, October 31, from heart disease, aged 60.

Harvey E. Williamson, M. D., Keokuk, (Ia). Medical College, 1894; a member of the Kansas Medical Society; local surgeon of the Frisco System and Missouri, Kansas and Texas Railway, at Olathe; surgeon to the deaf and dumb institution of Kansas, Olathe; who five years ago had the misfortune to be thrown from, and run over by a street car in Kansas City, the injury necessita-

ting the amputating of both feet; died at the home of his parents in Clarinda, Ia., October 23, aged 42.

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Joseph Werthner, M. D., Miami Medical College, Cincinnati, 1882; of Burdick, Kan., formerly of Dayton, O; died in Elmo, Kan., October 20.

—o—
James H. Gaston, M. D., Miami Medical College, Cincinnati, 1872; a veteran of the Civil War; from 1888 to 1890 treasurer of Monroe County, Ind., died at his home in Axtell, Kan., October 11, from heart disease, aged 67.

MISCELLANEOUS.

A Lawyer's \$800,000 Fee.—The attorney who defended F. R. Heinze, the "Copper King", in his trial for misapplication of the funds of the Mercantile National Bank, received a check for \$800,000 for his services. If a physician had saved his life or that of one of his family, what would have been thought of such a fee. —Medical Council.

—o—
The Club Doctor an Incompetent.—From the standpoint of a medical practitioner the contract physician is regarded in precisely the same light as any other worker who lowers the wage scale. From the standpoint of the laity his service is usually unsatisfactory because, with few exceptions, the man who accepts any form of contract at a loss will not discharge his obligations in good faith, and acceptance usually implies incompetence or the disposition to advertise himself.—Benedict in the A. M. A. Journal.

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For Sale.—Yale Operating chair in good condition. Address Dr. A. H. Connett, Great Bend, Kansas.

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France to Adopt Antityphoid Vaccination.—The French government has decided to establish the method of vaccination against typhoid fever in the colonial army, and Professor Andre Chantemesse, the inventor of antityphoid vaccination, left Paris on July 27th for Oudya, where he has been commissioned by the minister of war to start vaccination among the troops stationed on the Algerian Morocco border. The decision of the minister is said by the New York Times to have been based on the fact that cases of typhoid fever among the American soldiers are now six times fewer than before the Chantemesse method was adopted.

Besides establishing it in the army, the French government is now encouraging civilians to try the new method, and Dr. Chantemesse has opened a special ward at the Hotel Dieu in Paris, where everybody is vaccinated free of charge.—N. Y. Medical Journal.

—o—
For Sale.—\$2,000 practice Eastern Kansas, to physician buying office fixtures of \$450. One physician besides myself, 500 inhabitants. Address Buchu % Journal.

—o—
Correct Business Methods Taught Physicians.—If the division of fees, contract and lodge practice, commissions from druggists, sly methods of advertising in newspapers in connection with operations and accidents are wrong in principle and hurtful both to the individuals who do such things and to the profession as a whole, why not give prospective physicians instruction in regard to these matters while they are being molded, so that they may at least start in the right direction? Instead of doing this, most of the medical colleges turn their graduates adrift at the end of the college course, without chart or compass, and then censure them and bemoan the perversity of human nature because they take the wrong direction. Most of them want to do right, and the majority finally get right but only after many false moves and mistakes, against which they should have been warned.—Journal A. M. A.

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 Often, in talking with some noted doctor, I have remembered the saying of my old uncle, Prof. George B. Wood: "Show me a man who says drugs are of no value in the treatment of disease, and I will show you a man who does not know how to use them." Based on forty years' experience were these words; confirmed by forty years more of experience have they been in a second generation.—H. C. Wood, M. D.

—o—
 Desiring to spend several months in post-graduate work, I wish to correspond with some good live woman physician, interested in gynecology and obstetrics, with view to partnership, or transferring practice outright. Excellent opportunity for right party of doing splendid office practice. Address "KANSAS" care Journal.

—o—
Hydrophobia.—A. M. Stimson, Washington, D. C. (Journal A. M. A., September 30), discusses the measures necessary for the eradication of hydrophobia. There is no part of the world

that is not capable of harboring the disease and, since the dog is the perpetrator of rabies, any measures must apply first to dogs. When wild animals become infected they should, of course, be exterminated and this should also be the case with ownerless dogs or those which may not be legally provided with a current license tag. Owners should be legally responsible for damages, and the public should be specially educated with regard to the disorder. There should be the means of obtaining reliable information in all parts of the country and the control of the importation of dogs into one region from another. These are general measures. Among the special measures to be employed are the muzzling and restraint of dogs, which should not be limited to any special period of the year, but enforced whenever cases of rabies occur and for a minimum period of at least six months. Animals that have been bitten by other animals should be quarantined and in the case of cats and dogs they should be killed. While the necessity of disinfection may not appear pressing it is advisable. Compulsory notification of cases of rabies and compulsory notification of new animals bitten should be enforced and there should be authority to enforce a quarantine on infected localities. Pasteur treatment should be provided for under state and municipal auspices and each state and territory should vest authority under some central office which shall collect information regarding the disease and give information concerning it, investigate reported cases and epizootics, maintain permanent and apply temporary measures of control, cooperate with corresponding authorities in contiguous states, provide a laboratory for examination of suspicious material, and provide for preventive inoculation of exposed persons. The central authority may be in the state board of health and local veterinarians may be intrusted with the control of the disease in their districts. The difficulties in the way are the present inadequate measures for regulation, and the mental attitude of the average dog owner is the greatest obstacle of all. This may be due to selfishness or indolence or indifference. The lack of uniformity and correlation of methods employed in adjoining territory has been another great obstacle. In England it was only after the antirabies methods were intrusted to one central authority that permanent amelioration and finally complete eradication of the disease was effected.

—o—

A Comparison of Salvarsan and Sodium Cacodylate.—Nichols Journal A. M. A., says: "For all practical purposes dioxydiamidoarsenobenzol should be regarded as a new substance and not

merely as a new arsenical compound. The arsenic is only a part of a complicated instrument and would be of little value alone. The arsenic must be reduced, trivalent, and in firm combination with the benzol ring, and the benzol ring must be substituted with the OM group and the NH² group in the orthoposition before a maximum destruction of spirochaetæ is possible. From this point of view, sodium cacodylate has no more relation to dioxydiamidoarsenobenzol than a pair of artery forceps has to a lithotrite in the extraction of a stone from the bladder."

—o—

For Sale.—Complete office equipment for general and surgical practice. 24 plate static with X-ray attachments and two tubes. White enameled double instrument case with large assortment of good instruments. Wall plate and battery. Rhinological table, plate glass top and shelf and instruments, including atomizers and tank, mounted in cabinet. Operating table and cushion. Enameled washstand and tank. Some drugs. Gasoline stove. Fully equipped obstetric grip. Fine large mission desk. Waiting room furniture, and other items. Town 700, 4 churches, electric lights, 2 banks, good mill and 2 elevators; garage. All classes of business represented. Fine grade and high school. On main line Mo. Pac. Am quitting practice.—Address G. % Journal.

—o—

Maurice H. Richardson, M. D., (Iowa State Medical Journal Oct. 15), The only treatment of breast tumors which as yet gives any real hope or permanent cure is thorough removal. Operable cancer of the breast must not be subjected to any other method, because of the loss of precious time. I am obliged, at the beginning of my paper, to give the greatest emphasis to this opinion, because I have seen so many preventable disasters caused by this source of delay in resorting to the knife. And it is not at the hands of the inexperienced or of the empirics that I see these disasters, but in the hands of men experienced in the treatment of cancer, who have become convinced of the efficacy of non-operative methods and who cannot perceive the most glaring failures of their methods. The most pathetic instances of this kind of failure have been through months or years of x-ray treatment, during which the patients have gone from operability to glaring hopelessness.

WHO WANTS WILEY FIRED?

Who wants Wiley fired?

"I," says the can of nearly tea.

"Just look what he did to me

He or I must be retired.

So I want Wiley fired."

Who wants Wiley fired?

"I," says the case of almost cheese.

"Once I lived a life of ease.

But now this fellow makes me tired.

So I want Wiley fired."

Who wants Wiley fired;

"I," says the ham that's acid cured.

"This buttin' in can't be endured.

The wonder is that he was hired.

Sure, I want Wiley fired."

Who wants Wiley fired?

"I," says the masquerading jam,

A product he has tried to damn.

"Get rid of him!" is what I wired.

Yes, I want Wiley fired."

Who wants Wiley fired?

Why, all the bogus foods and drugs,

And all the germs and microbe bugs.

Theres nothing quite so much desired.

As to see Wiley fired..

—C. W. S. in N. Y. World.

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CLINICAL NOTES

Precautions Concerning the Use of Iodine in Surgery.—Walker offers the following precautionary suggestions in regard to the surgical use of iodine.:

1. Always secure as dry a condition as possible of the skin, bone-cavities, and all other cavities exposed to the air. This is especially important in emergency work.

2. Always use the tincture in full strength on all mucous membrane where inflammation is due to infection. All such cases should be drained with gauze.

3. Whenever iodine in any strength is used in closed cavities, such as the urinary bladder or uterus, either thoroughly

douche with saline solution and hydrogen peroxide or insert a drain—preferably a small gauze drain.

4. Do not use iodine in combinations with other drugs. It should always be used alone. If it is desired to dilute the tincture, use water.

5. Do not use a hypertonic salt solution, Wright's solution, or hydrogen peroxide for twelve to twenty-four hours after using iodine.

6. Never use the full strength in the vagina or rectum.

7. In all indolent wounds or ulcers, apply a bandage as nearly air-tight as possible for twelve to twenty-four hours after a thorough application of iodine.—F. E. Walker, Jour. Minn. State Medical Association.

—o—

Iodin in Corneal Ulcer.—E. L. Meierhof, New York (Journal A. M. A., August 26), recommends the use of a watery solution of iodine, 1 grain, sodii iodid, 3 grains, and water, 1 ounce, in the treatment of corneal ulcer. Three drops of this solution instilled into the eye three or four times daily without other treatment has been in his hands very successful. The application is not very painful and the pain lasts only ten or fifteen minutes. Occasionally the conjunctiva becomes congested during the treatment, but this is only temporary. After twenty-four or forty-eight hours of this treatment the eye becomes less painful and more tolerant to light and the headache common in these cases rapidly diminishes. The solution can be used for several weeks without causing further annoyance, even if the ulcer is healed. He has treated fifteen cases altogether by this method with such encouraging results that he now offers it to the profession generally.

—o—

Fracture Plates.—The open treatment of fractures of the long bone and the use of fracture plates is discussed by E. Martin, Philadelphia (Journal A. M. A., October 21). The important essentials are surgical cleanliness which implies that the fingers must not be put into the wound even if rubber gloves are used, since in working around fractured bones rubber gloves are apt to leak. Early operation is indicated because then complete reduction is best accomplished. The roentgen x-ray should always be used when available, as it enables us to avoid painful manipulations. The incision should conform to the principle of being planned so as to injure no important structure. In the case of fractures not operated on within a week and in old fractures,

longitudinal traction applied directly to the upper end of the lower fragment is very useful and this, in case of fractured femur, may call for one hundred pounds weight and sometimes nearly that is needed in fractures of the forearm. The weights are allowed to exert their pulling effects from five to ten minutes, traction being continued till there is actual lengthening of about one-quarter of an inch. This lessens the strain on the buried fixation apparatus and aids in apposition. Since the tolerance of tissues to foreign bodies is inversely proportioned to their bulk, it is important that, if plates are used, they should be of the smaller size capable of standing the strain to which they will be subject. Martin has had a plate made of vanadium steel which is much stronger than those usually supplied and is further reinforced at the point of greatest danger of breakage. It is absolutely essential that the drill for boring the drill holes be of such size that the screws may be driven in easily and yet cut their own thread. The screw should be threaded to the head and of such length that they will reach the medullary cavity but not pass far into it. Two screws at each end of the plate will be sufficient but they should not be placed nearer the line of break than a quarter of an inch. External support will be still needed after the insertion of the plate as the twisting and rocking motions of the limb still have their effect on the line of fracture. The after fixation is best done by a plaster of Paris casing which will keep the joints fixed and also the muscles at rest. The casing should be split while soft so that in part it can be removed, allowing the site of operation to be inspected and massage and passive motion to be applied as soon as advisable. While union, is usually delayed and the results as a whole not uniformly good, they are better than could be possibly secured otherwise. As a rule, the less foreign matter put in a wound, the quicker it gets well. What proportion of buried plates, if any, give trouble, remains yet to be proved.

—o—

In examining for joint disease in children, the element of fear must always be considered. A frightened child will manifest more or less muscular resistance and tension, which may deceive the examiner as to the true existing condition. Therefore it is well to divert the little patient's attention by letting him think that the various manipulations are only a game for his amusement. —American Journal Surgery.

—o—

Inflammation of the Middle Ear.—Savage (Journal Tennessee State Medical Association, March 1911) recommends the follow-

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